WILDLIFE ACTION PLAN MAP ANALYSIS INFORMATION
New Hampshire Fish and Game Department – November 2025

Contents:

DETERMINING ECOLOGICAL CONDITION

Overview

The ecological condition of habitats depends on a variety of factors, some of which can be assessed in GIS. Other elements of ecological condition must be determined through field work. This analysis used data available at a statewide level to assess the ecological condition of each of the mapped habitats in NH. The current assessment is the third iteration and uses several new datasets, including new underlying habitat land cover data.

Habitat condition was analyzed to develop statewide and regional rankings that identify the highest condition habitat relative to all polygons of a given habitat type in the state. The goal is to provide regional planners and conservation professionals with a tool to help identify the most ecologically intact wildlife habitat areas.

Using habitat types mapped in the NH Wildlife Habitat Land Cover (nhhabitat), plus streams, rivers, lakes and ponds, NHFG biologists developed condition filters to analyze which habitat patches are in the best relative ecological condition in the state. These filters are composed of GIS data that indicate to what degree a particular patch of habitat has good biological diversity (particularly in terms of rare species), is connected to other similar patches in the landscape, and is negatively impacted by humans. All data used was available as a statewide dataset, except some coastal data which covered the entirety of the specific coastal habitat. Some data is used in all habitat filters, and some is specific to a particular habitat type. Each filter includes biological, landscape, and human impact factors. These three types of data are combined into BIO, LAND and HUMAN scores and are shown in the attribute fields.

Each habitat type has different factors that may affect its condition, but there are some commonalities. Biological factors included rare species richness for animals, plants and exemplary natural communities. Landscape factors include area of habitat patch, local connectedness (TNC), landscape context (TNC), and other factors depending on the habitat type. Human impacts include data such as road density, and an Index of Ecological Integrity (UMass). Pages 3-8 outline the data used for each habitat type; the metadata for each habitat layer provide additional details. Examples of data types that were not used for all habitats included such things as vertebrate species richness for BIO, number of wetlands in each complex for LAND, and distance to nearest road for HUMAN. See details for each habitat below and in the metadata.

A set of available statewide data was collected for each of these three groups, with each individual score being on a 1-100 scale (percent rank). The BIO, LAND, and HUMAN scores were evenly weighted and combined come up with a single condition score (COND). This is a relative score, based on all habitats that occur in NH. Habitat patches were assessed as polygons except for the five matrix forest types, which were assessed in raster format (see below).

Regional Datasets Used

Several datasets were brought together to create a regional analysis of habitat condition for the northeast, with information compiled in a report called Condition of the Northeast Territorial and Aquatic Habitats (Anderson et al 2013; data updated 2022) from the Nature Conservancy, under a funding by the Northeast Association of Fish and Wildlife Agencies Regional

Conservation Needs Program and the North Atlantic Landscape Conservation Cooperative. Some of the data also created under funding by these sources, were authored by other entities such as the University of Massachusetts-Amherst (UMass). The report provides much more detail. Please see references at the end of this document.

LOCAL CONNECTEDNESS (UMass, December 2023): Regional landscape connectivity is essential for gene flow and the movement of organisms to maintain connected networks of refugia, and to facilitate range shifts in response to climate change. UMass developed "ecoConnect" estimating multi-scale, ecosystem-specific, regional connectivity that is independent of pre-designated cores, and applied to the northeastern U.S. The hybrid approach combines random low-cost paths with a graph theory metric. Results can be used at multiple scales to preserve and restore ecological connectivity. https://umassdsl.org/data/ecoConnect/

LANDSCAPE DIVERSITY (TNC, May 2022): Refers to the microhabitats and climatic gradients available in the immediate neighborhood surrounding any 30-meter cell of land. The persistence of species in an area increases in landscapes with a wide variety of microclimates created by the topography (topo-climates), elevation and hydrology. Measured by counting the variety of small-scale landforms, elevation range, and evaluating the density and configuration of wetlands in a 100-acre neighborhood around every point on the landscape. The Nature Conservancy Center for Resilient Conservation Science: https://crcs.tnc.org/

INDEX OF ECOLOGICAL INTEGRITY (UMass-DSL, January 2022): The Index of Ecological Integrity (IEI), is a product of the Conservation Assessment and Prioritization System (CAPS), an ecosystem-based approach for assessing the ecological integrity of land and water and subsequently identifying and prioritizing areas for habitat and biodiversity conservation. Ecological integrity is defined as the ability of an area to sustain important ecological functions over the long term. https://umassdsl.org/

Analysis of Surface Waters

Surface waters were assessed a little differently than terrestrial habitats. Highest ranked streams and rivers were classified with the two goals in mind. The first goal was to identify intact headwater stream habitat. First, second, and third order stream reaches were classified based on an approach developed by The Nature Conservancy. These attributes were applied to each stream reach (section of stream between two confluences of streams). The attributes used were:

High Quality streams and rivers (Top 30% by ARM region) assessed for three attributes:
1.) Low impacts from development and agriculture (less than 10%), (USGS, 2024)
2.) Low impervious surfaces less than 5% (NOAA C-CAP, 2021)
3.) Functional stream network

Headwater streams (1st/2nd order): percent impervious, development, and agriculture will be calculated for the entire watershed. For larger streams and rivers (3rd order higher) percent impervious, development, and agriculture will be calculated for the 250-meter riparian buffer. Source: NHDPlus ver. 2.1 catchments

River and stream reaches that meet criteria for High Quality habitat can be further prioritized:
 • Linear connectivity (length of functional stream network)
   Functional stream network is the length of free-flowing river or stream habitat up to the next impassable barrier. Where stream crossing data exists, only crossings in the AOP "fully passable" category will not be considered barriers. All unsurveyed stream crossings will be assumed impassable. All active dams will be considered impassable barriers.
 • Upstream Watershed fragmentation
   The density (#/stream mile) of stream crossings and active dams in the watershed upstream excluding bridges and surveyed crossings in the AOP category, "Fully Passable", and the Geomorphic Compatibility category, "Fully Compatible".
 • Watershed integrity
   Total area of "High Quality" headwater stream (1st and 2nd order) watersheds and riparian habitat within a 250m buffer of larger streams and rivers (3rd order and higher)/Total area of headwater stream watersheds and larger stream and river habitat within a 250m buffer that does not meet the criteria for "High Quality" river and stream habitat
 • Accessibility
   Total number of barriers downstream. Barriers include any active dam with no fishway and any stream crossing excluding bridges and surveyed crossings in the AOP category for "Fully Passable".

A second approach was intended to identify intact shoreline habitat along larger streams and rivers. For fourth order streams and larger, undeveloped land (100% natural land cover) within a 100m riparian buffer was considered high priority if it extended for a minimum length of 250m of river frontage along either river bank.

Lakes and Ponds were also assessed for four attributes, rescaled 1-100:
1.) Local condition within a 200 meter shoreline buffer: percent natural land cover, no dams, distance to nearest road or trail. Categories (based on TNC methodology):
    1 buffer >=90% natural/ no dams/ nearest road or trail is >1 mi
    2 buffer >=90% natural/ no dams/ nearest road or trail is .5 – 1 mile

       3 buffer >=90% natural/ no dams/ nearest road 500m -.5 mile
       4 buffer >= 90% natural/no dams/ nearest road < 500m
       5 buffer < 90% natural/no dams/ any remoteness
       6 Dams

2.) Watershed condition (HUC12): intactness percent natural cover (USGS, 2024). Categories:
      1 HUC12 Watershed Very Intact: >= 90% Natural Cover
      2 HUC12 Watershed Lightly Impacted: 80-90% Natural Cover and <10% developed
      3 HUC12 Watershed Impacted: All Others

3.) Average **Aquatic** Index of Ecological Integrity (University of Massachusetts-DSL, 2021)

4.) Size of the water body (USGS, 2024) – standardized by NH class (lake or pond, cold or warm)

$$CONDITION = LocalCondition_R + WatershedCondition_R + EcologicalIntegrity_R + Size_R) / 4$$

Forests

In the NH WAP, a matrix forest is a large contiguous area having geo-physical conditions favorable to a particular suite of forest land cover classes. The matrix forest relative condition was determined by evaluating the entire matrix as a seamless raster. This assigns a condition score to each 10-meter pixel in the forest habitat data. Pixels must be clustered into a patch of at least 100 acres to rank as highest in the state or biological region. In this method, only the portion of a forest patch meeting the condition threshold is assigned to the highest rank rather than the entire polygon. Small clusters of highest-ranked pixels (less than 100 acres) were assigned Tier 3 Supporting landscapes.

Wetlands and Floodplain Forests

Wetlands were assessed in part as part of wetland complexes. Wetland complexes were created by grouping all freshwater wetlands that occurred within a 250-meter separation distance as follows: polygons from all wetland habitat types (marsh, peatlands, temperate swamps, northern swamps, and floodplain forests) were merged and then buffered by 125 meters to create preliminary groupings. The buffer areas were then split by major routes in the NH Dept. of Transportation's road network, so that nearby wetlands occurring on opposite sides of a highway would be assigned to different wetland complexes.

Wetland complexes containing National Wetlands Inventory (NWI Plus) mapped wetlands: only the NWI polygons were used to calculate condition metrics. In locations where the wetland complex did <u>not</u> contain NWI mapped wetlands, then the Northeast Terrestrial Habitat (NETH) wetland data was used.

RANKING HABITATS

Within each habitat type, the patches were ranked into one of four categories based on percentage of that habitat by area.

The four rankings are:
> **Tier 1 Highest Ranked in the State by Ecological Condition**
> **Tier 2 Highest Ranked in the Biological Region by Ecological Condition**
> **Tier 3 Supporting Landscapes**
> **Not top ranked (all the rest)**

The percentages of each habitat that are included in each rank are listed in the table on page 9. Coastal and alpine habitats are so rare that all patches are included in Tier 1 highest ranked habitat in the state; however, the relative condition of salt marshes is available through the NH Salt Marsh model (contact Great Bay NERR staff for more information).

Highest Ranked in the State by Ecological Condition compares each habitat type regardless of where in the state it occurs. Since NH is ecologically diverse, habitats were ranked within their ecoregional subsection. Ecoregional subsections reflect broad regional patterns of geomorphology, stratigraphy, geologic origin, topography, regional climate, and dominant associations of potential natural vegetation. The Nature Conservancy has identified 9 ecoregions in New Hampshire. These were used to rank habitats as **Highest Ranked in the Biological Region by Ecological Condition**. Aquatic Resource Mitigation fund regions (based on HUC8 watersheds) defined the biological regions for wetland habitats.

The condition of a habitat patch will deteriorate if the surrounding landscape is degraded. A third ranking, **Supporting Landscapes**, consists of the remainder of the top 50% of each habitat type, and The Nature Conservancy's Resilient and Connected Network (June 2023).

To capture occurrences of specialist species with imperiled populations, a select set of wildlife Element Occurrences (areas known to support populations of rare species) from the Natural Heritage Bureau database was used either to elevate underlying habitat polygons to the highest rank in NH or to buffer locations within an already high ranked matrix forest. The same was done for significant ecological features identified by NH Natural Heritage Bureau, elevating them to Tier 2. Both additions are incorporated in the WAPTIERS data layer. A description of the species, plants and natural community add-ins begins on page 10.

Removing Small Isolated Patches:
A filtering process was run in ArcGIS software to remove small (< 1 acre) isolated areas of ranked habitat that were separated from contiguous habitat blocks due roads or development.

For more details on this work, see the metadata for habitat land cover and waptiers layer.

ATTRIBUTES USED IN CONDITION FILTERS FOR SPECIFIC HABITATS
The following factors were quantified and combined to create a single score for each habitat polygon. These scores were used to rank habitat polygons or sections of forests. Habitats are listed alphabetically.

Alpine – all habitat is top ranked

Appalachian Oak Pine Forest – See Matrix Forests

Coastal Habitats: Coastal Islands/Rocky Shore, Dunes, Salt Marsh – all habitat is top ranked

Cliff and Talus Slopes, Rocky ridge
Species richness of rare animals within their dispersal distances from the polygon (2024)
Species richness of rare animals within polygon (2024)
Species richness of rare plants in polygon (2024)
Richness of rare and exemplary natural communities in polygon (2024)
Total Area (hectares)
Local Connectedness
Index of Ecological Integrity
Recreational rock climbing (Y=yes, U=undetermined)
Distance to nearest hiking trail (meters)
Distance to nearest road (meters)

BIO $(A\_RICH\_BUF_R*.25) + (A\_RICH\_POL_R*.25) + (P\_RICH\_POL_R*.25) + (C\_RICH\_POL_R*.25)$
LAND $(HECTARES_R*.5) + (LCONN_R*.5)$
HUMAN $(IEI_R*.25) + (CLIMBED_R*.25) + (DISTHIKE_R*.25) + (DISTROAD_R*.25)$
COND $(BIO+LAND+HUMAN)/3$ as defined above

Floodplain Forest
Species richness of rare animals within their dispersal distances from the polygon (2024)
Species richness of rare animals within polygon (2024)
Species richness of rare plants in polygon (2024)
Richness of rare and exemplary natural communities in polygon (2024)
Area (hectares) of largest floodplain forest patch in the wetland complex
Number of floodplain forest patches in the complex
Local Connectedness
Landscape Complexity
Index of Ecological Integrity
Road density within 250 meters of the wetland complex
Distance to nearest road (meters)
Percent impounded
Distance to nearest dam (meters)

BIO $(A\_RICH\_BUF_R*.25) + (A\_RICH\_POL_R*.25) + (P\_RICH\_POL_R*.25) + (C\_RICH\_POL_R*.25)$
LAND $(LGFFHA_R*.25) + (NUM\_FF_R*.25) + (LCONN_R*.25) + (LCPLX_R*.25)$
HUMAN $(IEI_R*.2) + (ROADDENS_R*.2) + (DISTROAD_R*.2) + (IMPONDED_R*.2) + (DISTDAM_R*.2)$
COND $(BIO+LAND+HUMAN)/3$ as defined above

Grasslands/Shrubland
Species richness of rare animals within their dispersal distances from the polygon (2024)
Species richness of rare animals within polygon (2024)
Species richness of rare plants in polygon (2024)
Richness of rare and exemplary natural communities in polygon (2024)
Area (hectares)
Similarity (amount of grassland/shrubland within 1km)

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Road density
Distance to nearest road (meters)
Eastern Meadowlark landscape capability model (UMass, 2022)

BIO	$(A\_RICH\_BUF_R *.25) + (A\_RICH\_POL_R *.25) + (P\_RICH\_POL_R *.25) + (C\_RICH\_POL_R *.25)$
LAND	$(HECTARES_R *.5) + (SIMILARITY_R *.5)$
HUMAN	$(ROADDENSR *.34) + (DISTROADR *.33) + (EAME_R *.33)$
COND	$(BIO+LAND+HUMAN)/3$ as defined above

Hemlock Hardwood Pine Forest – See Matrix Forests

High Elevation Spruce Forest – See Matrix Forests

Lakes and Ponds (see pages 3-4)

Lowland Spruce Forest – See Matrix Forests

Marsh and Shrub Wetlands, Peatlands, Northern Swamps and Temperate Swamps
Species richness of rare animals within their dispersal distances from the polygon (2024)
Species richness of rare animals within polygon (2024)
Species richness of rare plants in polygon (2024)
Richness of rare and exemplary natural communities in polygon (2024)
Area of largest [wetland, by type] in the complex (hectares)
Number of [wetland, by type] polygons in the complex
Number of dominant NWI vegetation classes in the complex
Local Connectedness
Landscape Complexity
Index of Ecological Integrity
Road density within 250m of the complex
Distance to nearest road (meters)

BIO	$(A\_RICH\_BUF_R *.25) + (A\_RICH\_POL_R *.25) + (P\_RICH\_POL_R *.25) + (C\_RICH\_POL_R *.25)$
LAND	$(LGMARSHHA_R *.2) + (NUM\_MARSH_R *.2) + (VEG\_RICH_R *.2) + (LCONN_R *.2) + (LCPLX_R *.2)$
HUMAN	$(IEIR *.34) + (ROADDENSR *.33) + (DISTROADR *.33)$
COND	$(BIO+LAND+HUMAN)/3$ as defined above

Matrix Forest and Pine Barrens
Species richness of rare animals within their dispersal distances (2024)
Richness of rare and exemplary natural communities in the matrix forest polygon (2024)
Species richness of rare plants in the forest matrix polygon (2024)
Vertebrate species richness in the forest matrix polygon (VT/NH GAP Analysis)
Local Connectedness
Landscape Complexity
Similarity of habitat (within 1 km)
Size of unfragmented block within which matrix forest is located (NHFG, 2024)
Index of Ecological Integrity

BIO	$(A\_RICH\_BUF_R *.25) + (C\_RICH\_POL_R *.25) + (P\_RICH\_POL_R *.25) + (GAPVERTMAX *.25)$
LAND	$(LCONN_R *.25) + (LCPLX_R *.25) + (SIMILARITY_R *.25) + (MINORBLOCK_R *.25)$
HUMAN	(IEI_R)
COND	$(BIO+LAND+HUMAN)/3$ as defined above

Northern Hardwood Conifer Forest – See Matrix Forests

Pine Barrens – See Matrix Forests

Rivers and Streams (see pages 3-4)

RANKING LEVELS FOR EACH HABITAT TYPE AND ADD-INS

Tier 1 = Habitats of Highest Relative Rank by Ecological Condition in New Hampshire
Tier 2 = Habitats of Highest Relative Rank by Ecological Condition in Biological Region
Tier 3 = Supporting Landscapes

Habitat area already ranked as Tier 1 counts towards the percentages for Tier 2, but only those not already Tier 1 will be designated as Tier 2. This is also the same for Tier 3.

HABITAT	TIER	% USED FOR EACH RANK
High-Elevation Spruce-fir	1	Top 15% in NH by area
	2	Top 100%
Low-Elevation Spruce-fir	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Northern Harwood-Conifer	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Appalachian Oak-Pine	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Hemlock-Hardwood-Pine	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Pine Barrens	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Cliff/Talus/Rocky Ridges	1	Top 15% in NH by area
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Grassland/Shrubland	1	Top 15% in NH by area.
	2	Top 30% in Subsection by area
	3	Top 50% in Subsection by area
Wet Meadow/Shrub Wetland	1	Top 15% in NH by area
	2	Top 30% in ARM Region by area
	3	Top 50% in Subsection by area
Peatland	1	Top 15% in NH by area
	2	Top 30% in ARM Region by area
	3	Top 50% in Subsection by area

Temperate & Northern Swamps	1	Top 15% in NH by area
	2	Top 30% in ARM Region by area
	3	Top 50% in Subsection by area
Floodplain Forest	1	Top 15% in NH by area
	2	100% in Watershed Group
Rivers/Streams	1	100-meter buffer of top-ranked High-Quality stream reaches
Lakes/Ponds	1	200-meter buffer of the Top 25 most intact lakes, by lake class
Salt marsh	1	100%
Coastal Islands	1	100%
Dunes	1	100%
Alpine	1	100%
TNC Resilient Network	3	New England Resilient & Connected Network, customized, The Nature Conservancy (June 2023)
Animal occurrences	1-3	Occurrences of selected endangered, threatened or special concern species. (Dec. 2024) See notes.
Ecological features (NHB)	2	High Priority natural communities ranked by NH Natural Heritage Bureau. (Dec. 2024) See notes.

OCCURRENCES USED TO ELEVATE HABITAT RANK

Data for rare species and exemplary natural communities used in these analyses were subset:
- For animals: restricted to endangered, threatened, special concern and S1-S2 species with precise location information (precision = "seconds") observed within the last **25 years**
- For plants: restricted to populations with precise location information (precision = "seconds") that were observed within the last **25 years**
- For natural communities: restricted to those observed within the last **40 years**

For important background information on NH Natural Heritage Bureau data, see *Important Background Information for Interpreting Species Richness Counts based on NH Natural Heritage Bureau Data.*

Selected Rare Wildlife
Animal occurrence records were extracted from the NH Natural Heritage Bureau database and overlaid on the WAP habitats. Only geographically precise data recorded within the last 25 years were used. For some species, known core populations, population models or reproductive data were used to refine locations to core populations. Except where noted, the presence of these species elevated the habitat patch to Tier 1: Highest Ranking by Ecological Condition in New Hampshire. Species whose populations were already well covered by the basic condition rankings were not included.

Criteria used to select species:

- Endangered or threatened in NH
- Limited populations known or likely to occur
- Isolated or restricted in NH
- Point specific sensitive information
- Provides critical habitat for state's population which his not already highly ranked

Selected Element Occurrences (EO) 1999-to-2024, excluding general precision locations:

Birds:

    Peregrine – nests (natural sites) elevated cliff/talus/rocky ridge habitats

    Bald eagle – 300m around nesting habitat

    Golden Eagle – no breeding records of golden eagle in NH

    Common nighthawk – habitat surrounding non-rooftop nest sites

    Pied-billed grebe – elevated marsh habitat

    Common loon – productive nests (CS per TP) elevated Lakes and Ponds.

    Northern harrier – elevated grassland, marshes and peatlands within 400 meters of nest

    Upland sandpiper – elevated grasslands

    Grasshopper sparrow – elevated grasslands

    Piping plover, roseate tern, common tern, least tern – all occur on tier 1 coastal habitats.

    Red knot – no breeding records

    Cliff swallow, Purple martin – no additional habitat mapped (nests are all structures)

    Cerulean warbler – forest block associated with occurrences

    Eastern meadowlark – grassland associated with occurrences

Mammals:

    New England cottontail: focal areas and unfragmented blocks within 1km of occurrences

    Bat hibernacula – surrounding forest block within 1km of occurrences

    Small-footed bat – forest, talus/rock, wetlands within 500m of occurrences

    Tri-colored bat – no occurrences

    Little brown bat – forest and wetlands within 250m of occurrences

    Northern long-eared bat – forest and wetlands within 250m of occurrences

    Canada lynx – focal area derived from occupancy score > 0.5 (based on field detections)

    Gray wolf – no breeding records in NH

Reptiles and Amphibians:

    Fowler's toad – habitats within 250m buffer of occurrences, excluding development

    Snakes – Habitat of sensitive snake sites (conservation targets).

    Eastern hognose snake – elevated habitats within 500 meters of occurrences

    Northern black racer – focal areas delineated, forest within 1km, other habitats within 500m

    Marbled salamander – elevated whole forest blocks within 300m of occurrences

    Blanding's turtle – core areas plus sand/gravel, marshes, peatlands 500m from occurrences

    Spotted turtle – elevated sand/gravel, marshes and peatlands 500 meters from occurrences.

    Wood turtle – 300m buffer of high priority river reaches excluding impervious surfaces

    Eastern box turtle – known populations and surrounding habitat within 500 meters

Invertebrates:

    Hessel's hairstreak – elevate cedar swamp around occurrences

    Karner blue butterfly, persius duskywing skipper, pine pinion moth, frosted elfin – elevate pine barrens habitat.

    Ringed boghaunter – elevate habitats within 500 meters

    White mountain fritillary and White mountain arctic are within Tier 1 Alpine habitat

    Rusty patched bumblebee – no mapped occurrences

Aquatic Species:

    Eastern pond mussel – elevate ponds with occurrences

    Cobblestone tiger beetle – delineated cobble bars within 500m upstream and downstream

American brook lamprey – buffer of stream reaches identified by NHFG Inland Fisheries
Bridle shiner – focal areas delineated by NHFG Inland Fisheries
Brook Floater and Dwarf Wedge Mussels – elevated 100m stream buffers 1 km upstream and downstream of occurrences, stopping at dams.
Round whitefish – elevate water bodies with occurrences
Atlantic sturgeon – elevate water body
Shortnose sturgeon – occurrences are historic only and were not used.

TNC Resilient Network
New England Resilient & Connected Network (2023) used to elevate habitat to Tier 3 supporting.

Selected Rare Plants and Natural Communities
Natural communities are recurring assemblages of plants and animals found in particular physical environments. Three characteristics distinguish natural communities: 1) plant species composition, 2) vegetation structure (e.g., forest, shrubland, or grassland), and 3) a specific combination of physical conditions (e.g., water, light, nutrient levels, and climate).

Exemplary natural communities are the best remaining examples of New Hampshire's natural community types. Exemplary status is assigned based on a combination of the rarity of the natural community type and the quality rank of a given occurrence. Quality ranks are a measure of the ecological integrity of a community relative to other examples of that type based on size, ecological condition, and landscape context. The NH Natural Heritage Bureau (NHNHB) provided spatial data identifying NHNHB-priority sites not covered by habitat polygons meeting "highest quality" tiers based on condition filters. NHNHB developed a simple method to identify high priority natural communities based on element rarity and occurrence condition. All natural community and natural community system EOs that met the following criteria were considered "high" priority for conservation (see NHNHB for details):
  • High quality: Any "A" ranked element occurrence, regardless of rarity.
  • Rare elements: Any "B" ranked element occurrence for rare (S1 or S2) community types.
"EORANK" LIKE '%A%' OR ("EORANK" LIKE '%B%' AND (SRANK LIKE '%S1%' OR SRANK LIKE '%S2%'))

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