

# WILDLIFE AND ECOLOGY

# Jaffrey, New Hampshire

## Conservation and Public Lands



## Surface Water



## Streams

Perennial

Intermittent

## Wetlands (National Wetlands Inventory)



## Jaffrey Boundaries



## Municipal Boundaries



## County Boundaries



## Summits



## Roads

Highways

Local Roads

Unmaintained Roads

## Riparian Zones (300')



## Wildlife Action Plan Habitat

Floodplain Forest

Grasslands

Marsh and Shrub Wetlands

Peatlands

Ridge and Talus

## Wildlife Action Plan Matrix Forest

Appalachian Oak-Pine

Hemlock-Hardwood-Pine

High-elevation Spruce-Fir

Lowland Spruce-Fir

Northern Hardwood-Conifer

## DATA SOURCES:

NH GRANIT: All datasets displayed on this map are provided by NH GRANIT unless otherwise noted. Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center, under contract to the NH Office of Energy and Planning, and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

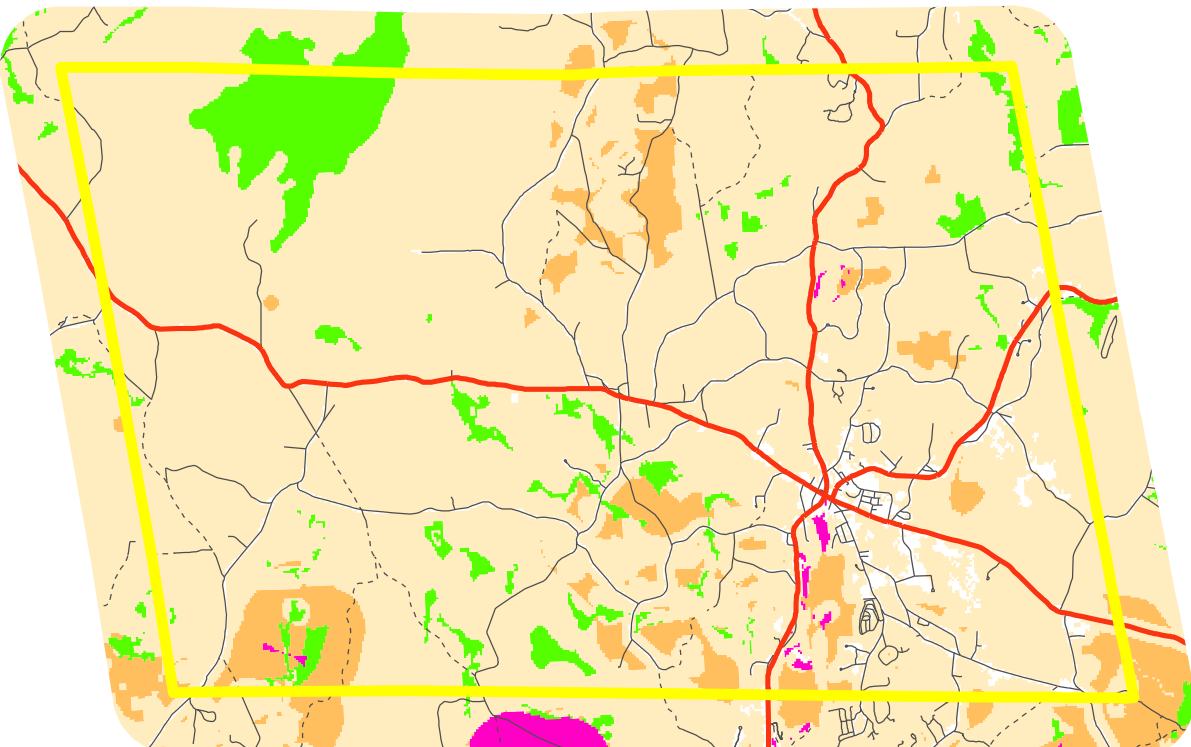
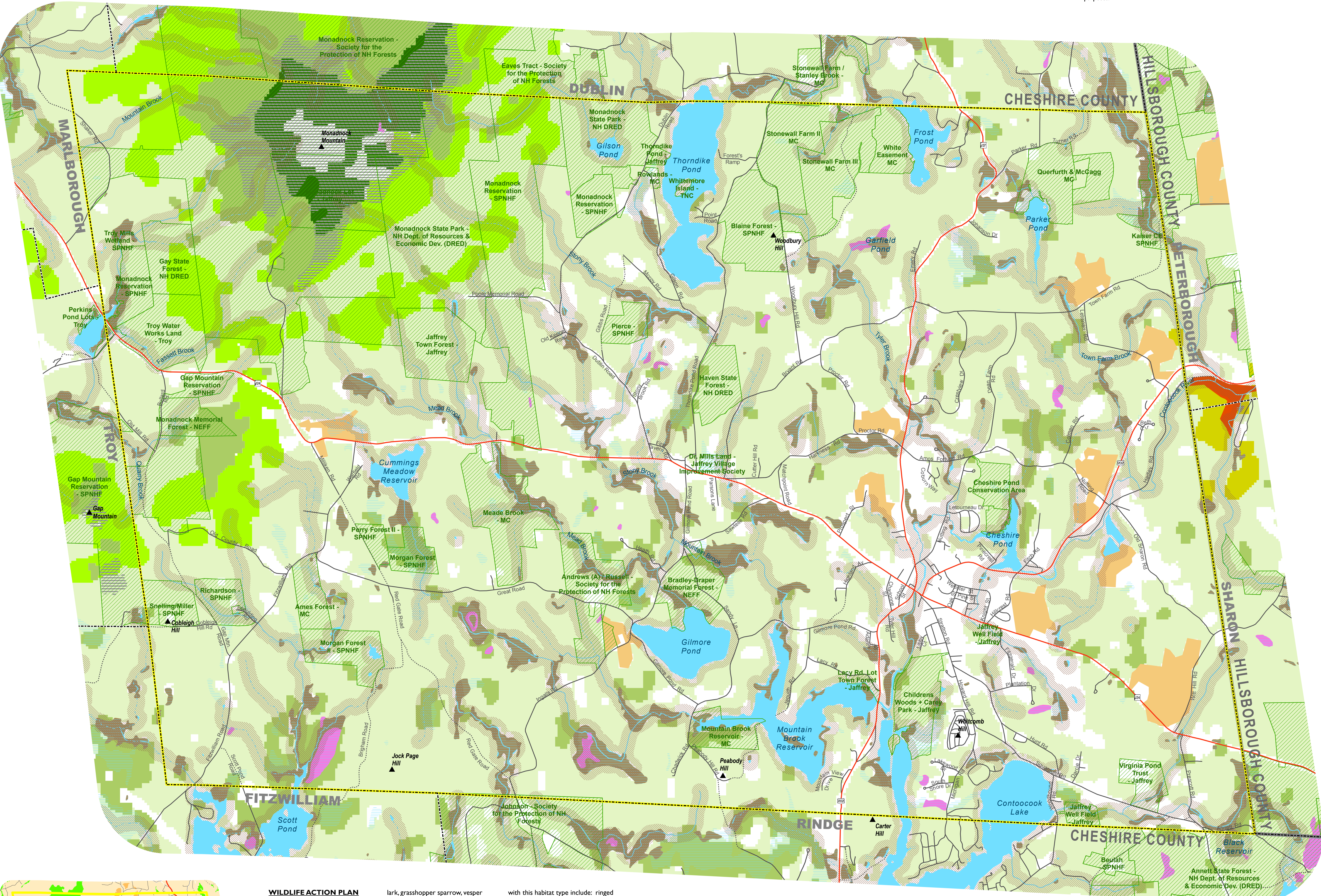
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## NATURAL RESOURCE INVENTORY

This map is part of a series produced as part of a natural resource inventory for the Jaffrey, NH Conservation Commission. The inventory gives a comprehensive illustration of Jaffrey's natural, cultural, and historic resources to inform land and resource use decisions. The various resources are described in detail in the accompanying document *A Natural and Cultural Resource Inventory and Land Conservation Plan*, produced by Kane and Ingraham and available from the Jaffrey Conservation Commission.

This map was created and published by Kane and Ingraham, April, 2009.



## WAP Habitat Condition Ranks

- Highest ranked habitat in NH
- Highest ranked habitat in biological region
- Supporting landscapes
- Habitat not top-ranked

This map shows NH's most important habitat as evaluated by the NH Fish and Game Department. High-quality habitat in Jaffrey is found in its many marsh and shrub wetlands as well as the high-elevation ridge and talus on Mount Monadnock.

## WILDLIFE ACTION PLAN HABITAT MODELS

**Floodplain Forest:** Floodplain forests are found in river valleys adjacent to river channels and are prone to periodic flooding. They persist on a variety of soils but tend to be nutrient enriched due to frequent nutrient inputs during flooding. Species of concern in NH associated with this habitat type include: jefferson salamander, northern leopard frog, wood turtle, red shouldered hawk, cerulean warbler, eastern red bat, and silver-haired bat.

**Grasslands:** Grasslands are defined here as areas greater than 10 hectares (about 25 acres) that are dominated by grasses, forbs, and sedges with little shrub or tree cover (generally less than 10%). Grasslands can include agricultural fields, airports, landfills, meadows, or heathlands. Species of concern in New Hampshire associated with this community include: northern harrier, upland sandpiper, purple marten, eastern meadowlark, horned

lark, grasshopper sparrow, vesper sparrow, northern leopard frog, and wood turtle.

**Marshes:** These open wetlands are dominated by herbaceous vegetation or short (less than 3 meters) woody vegetation (i.e. shrubs) and include three broad habitat types: wet meadows, emergent marshes, and scrub-shrub wetlands. Species of concern in New Hampshire associated with this habitat type include: American black duck, American bittern, American woodcock, blanding's turtle, common moorhen, eastern red bat, great blue heron, least bittern, New England cottontail, northern harrier, osprey, pied-billed grebe, ringed boghaunter, rusty blackbird, sedge wren, silver haired bat, and spotted turtle.

**Peatland:** Peaty wetlands form due to limited or no groundwater input and thus have poor nutrient content and acidic water. Organic materials decompose slowly resulting in the accumulation of peat. Species of concern in New Hampshire associated

with this habitat type include: ringed bog haunter, palm warbler, mink frog, and northern bog lemming.

**Ridge - Talus:** This habitat group includes two distinct types. Rocky ridge and summits outcrops are characterized by thin soils and dry, nutrient poor settings. Talus slopes are steep and rocky and range from open to barren to woodland. Species of concern in New Hampshire associated with this habitat type include: Melissa arctic, timber rattlesnake, peregrine falcon, and bobcat.

## RIPIARIAN ZONES

Riparian zones are mapped here as 300 foot stream buffers. These buffers (where they are undisturbed) provide protection to stream habitat by absorbing nutrients in runoff, providing shade (and thus reduced in-stream temperature), and inputs of organic (especially woody) debris. A secondary benefit is as habitat and movement corridors for species dependent on streams.

## WILDLIFE ACTION PLAN MATRIX FOREST MODEL

This model estimates climax forest type, i.e. the forest type which would eventually occur given total recovery from human disturbance based on abiotic site factors (such as slope, aspect, elevation, latitude, or soil type).

**Appalachian Oak - Pine:** These low elevation systems are found in southern New Hampshire in association with warmer and drier conditions and often in fire-influenced landscapes. Major canopy species include the "southern" oaks such as white and black oaks as well as red oak and white pine. Species of concern in NH associated with this habitat type include: Timber rattlesnake, eastern hogsnose snake, whip-poor-will, veery, eastern pipitrelle, eastern red bat, northern myotis, silver-haired bat, bobcat, and black bear.

**Hemlock - Hardwood - Pine:** These forests are often considered a

transitional zone between northern hardwood - conifer forests Appalachian oak - pine forests. Major canopy species may include hemlock, red oak, or red maple. These forests are likely to succeed to hemlock and beech over the long term. Species of concern in NH associated with this habitat type include: timber rattlesnake, northern goshawk, veery, cerulean warbler, eastern pipitrelle, eastern red bat, northern myotis, silver-haired bat, black bear, and bobcat.

**High-elevation Spruce - Fir:** These forests cover the exposed woodlands of NH's high summits and ridgelines and are comprised primarily of balsam fir, red spruce, and paper and heartleaf birch. Species of concern in NH associated with this habitat type include: spruce grouse, bay-breasted warbler, Bicknell's thrush, American marten, Canadian lynx, and northern bog lemming.

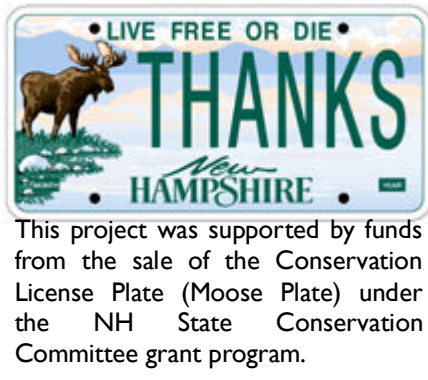
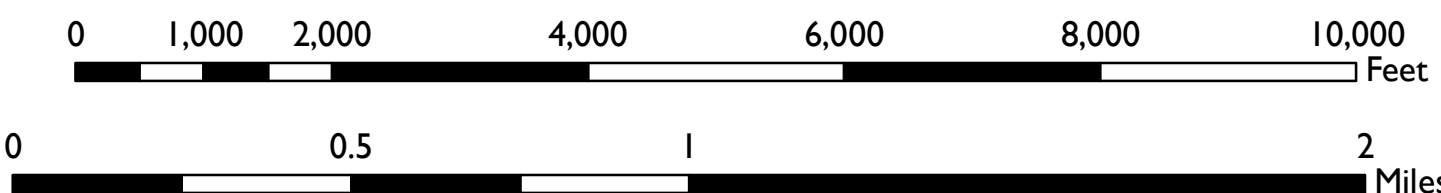
**Lowland Spruce - Fir:** These valley forests span an ecological gradient from swampy

black spruce bogs to well-drained red spruce forests. Species of concern in NH associated with this habitat type include: spruce grouse, Northern goshawk, three-toed woodpecker, bay-breasted warbler, purple finch, rusty blackbird, hoary bat, Canadian lynx, American marten, and northern bog lemming.

**Northern Hardwood - Conifer:** These mid-elevation forests generally include an even mix of sugar maple, yellow birch, and beech. They can include and frequently mix with red spruce and balsam fir (especially at higher elevations). Species of concern in NH associated with this habitat type include: Ruffed grouse, American woodcock, wood thrush, veery, Canada warbler, cerulean warbler, eastern pipitrelle, eastern red bat, hoary bat, northern long-eared bat, silver-haired bat, and gray wolf.

1:18,000

(1 inch equals approximately 0.3 miles)



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