

### III. Findings

#### A. Co-Occurrence Areas

Between February 28, 2006 and August 25, 2007, a total of 23 field days were spent gathering data on co-occurrence areas, wildlife and wetlands in Meredith. Field records from an additional survey day on October 5, 2002 was also included in the resultant data set. Three of the field days were spent exclusively doing roadside surveys in winter, wherein a total of 93.7 miles of roads were canvassed. An additional road survey during a spring amphibian movement night added 26.8 miles in the Meredith Neck area. Five additional days in spring and early summer combined both roadside and off-road surveys, bringing the total coverage of roadside surveys to 193.1 miles, or roughly twice the length of all public roads in Meredith. The remaining 14 field days involved off-road investigations of upland and wetland habitats. The total off-road effort covered 87.9 km of travel according to GPS track data. A summary of the field surveys can be found in Appendix C.

All but one of the 10 co-occurrence areas was investigated off-road. Only the Hawkins Brook co-occurrence area (CA #1) was limited to an initial roadside survey. For the reasons described in Methods above, this CA was determined to be too impacted by development to warrant either a wildlife assessment or prime wetland delineation. The remaining nine CA's were visited at least twice and some as many as five times. The most intensive work took place at lower Blake Brook (CA #6) and Hatch Brook (CA #4) where property permissions allowed a high degree of field coverage. The following changes to the sizes of each CA resulted from the 2006-2007 survey effort:

<b>High-Value Co-Occurrence Areas in Meredith</b>			
<b>ID</b>	<b>NAME</b>	<b>Phase I Acres</b>	<b>Phase II Acres</b>
1	Hawkins Brook	554.2	0.0
2	Bartlett Brook	95.8	65.3
3	Page Brook / Page Pond	664.4	935.9
4	Hatch Brook	457.8	438.3
5	Forest Pond/Dolloff Brook	479.0	445.2
6	Blake Brook/Lake Wicwas	831.9	751.8
7	Meredith Center/Chemung	1190.3	1467.7
8	Spectacle Pond	85.9	310.2
9	Leavitt-Ladd Mountain	380.5	1106.5
10	Pemigewasset Lake	447.3	525.0
	<b>TOTAL</b>	<b>5187.021</b>	<b>6045.848</b>

**Table 5. Changes in Co-occurrence Areas - NRI Phase I and Phase II**

The size of each co-occurrence area was altered to some degree. Five areas lost acreage and five areas gained acreage. Significant gains were added to Page Brook/Page Pond, where an additional high quality wetland on the west side of the basin was included because of the integral wildlife connection it had to the remainder of the CA along a perennial stream. Significant acreage was also added to #7, Meredith Center/Chemung, when it was determined that the Hamlin Recreation Area should really be split along the watershed divide separating Blake Brook from the southern part of Lake Wicwas. This action caused the Blake Brook CA (#6) to lose a significant amount of acreage. As noted under the Methods section above, the Meredith portion of the Spectacle Pond watershed was added into CA #8 after field inspection noted a high frequency of wide-ranging mammals, notably bobcat and coyote, that freely passed up and down the watershed between Mountain Pond and Spectacle Pond. Finally, considerable acreage was added to the Leavitt Mountain CA (#10) on the basis of top quality natural communities and wildlife habitat being discovered on Ladd Mountain. The latter suggested that this CA be renamed the Leavitt-Ladd Mountain Co-Occurrence Area.

A town-wide map of the revised co-occurrence areas is on the next page. Following this is a detailed synopsis of each CA. These two-page stand-alone documents include the following:

- a) Aerial photo (1998 DOQ) map showing the CA boundary and wildlife (mammal) observations
- b) CA Size in acres
- c) Location in Meredith
- d) Elevation Range
- e) General aspect (i.e. which way it generally faces)
- f) Average slope of the land (given as a range between mean low and mean high gradient)
- g) % Land Cover, including upland forest, open upland, wetland, and open water
- h) General land use & zoning districts contained within the CA
- i) General ecological attributes
- j) A description of the prime wetland within the CA (if applicable)
- k) Wildlife habitat description, including salient habitat types & dominant species
- l) Rare & endangered species and exemplary natural communities
- m) Wildlife issues of concern

The latter section highlights the potential impacts by humans on the integrity of the wildlife habitat within each CA. No specific recommendations for remediation are provided in these short synopses.



**Figure 7. Red Oak-Pine Rocky Ridge - Upper South-Facing Slopes of Ladd Mountain**