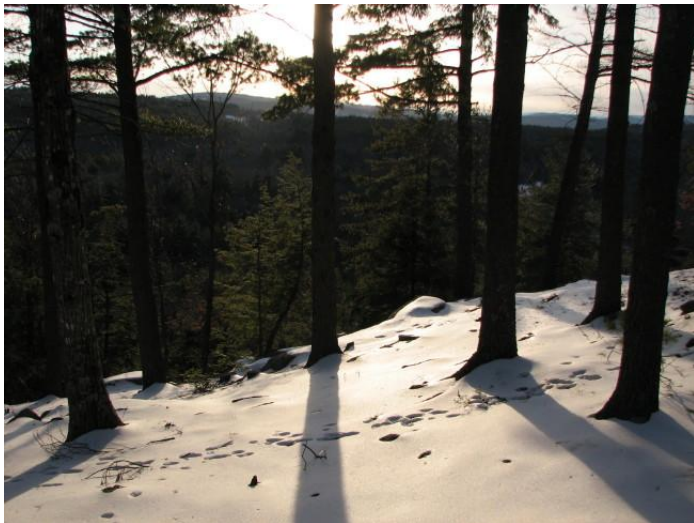


coyote, fox, fisher, bobcat, and bear. In Meredith, the most regularly used game trails in uplands were those made by deer, moose, bear, coyote, and bobcat. In wetlands and along streams, these tended to be heavily used by otter, mink, raccoon, and beaver. The corridors marked on the Meredith Mammal Observations map (see page 38) usually involved road crossings by one or more of these species. In upland areas, they were always marking game trails made by one or more of the upland game species. Although streams, rivers, and other shorelands regularly serve as wildlife corridors for aquatic species, no attempt was made to identify or locate wildlife corridors in these areas. A follow-up study regarding an assessment of wildlife passage through culverts and bridge openings is suggested in the final section.



Some wildlife corridors were marked in forested zones away from roads so as to better understand wildlife movements in areas of potentially high recreational use. This trail on the east side of CA #3 had tracks of deer, red fox, coyote, and fisher. Bear-clawed red pines were also common in the vicinity.

Figure 5. Wildlife Corridor Along a Ridge Top

C. Prime Wetlands Delineation

Wetlands were delineated in the field using standard protocols for a **Routine On-Site Determination** using the 1987 Army Corps of Engineers *Wetland Delineation Manual*. Since this was a town-wide mapping project and the level of mapping precision was sufficient using a hand-held GPS unit, the sampling procedures varied slightly from the routine on-site method for areas greater than 5 acres. Instead of using lateral transects to identify observation points in each plant community, a “sample-as-you-go” approach was used, that is, observation points were made *along* the wetland line within each plant community that was encountered. Direct observations of wetland plants in each plant community accounted for where obligate (OBL) and facultative wetland (FACW) plants were dominant.⁶ When it appeared that OBL and FACW

⁶ All vascular plants are ranked according to their “wetlandness,” that is, whether or not they typically occur in wetlands. An “OBL” plant occurs in wetlands >99% of the time and a FACW plant occurs in wetlands 67-99% of the time. Facultative (FAC) plants occur in wetlands 34-66% of the time, and facultative upland (FACU) plants occur in wetlands 1-33% of the time. Only upland plants (UPL) are considered absolutely non-wetland plants as they occur in wetlands <1% of the time.

plants were not dominant, a soil auger test hole was dug to check for hydric soil morphology. Hydric soil determinations followed guidance in Version 3 of the *Field Indicators of Hydric Soils* (NEIWPCC 2003). The combination of wetland plants, hydric soils, and evidence of saturation and/or inundation was used to determine where the GPS points were placed. Each point was placed at an angle point where the wetland boundary changed directions. The minimum distance between points was 20 feet, or roughly the average precision distance of the hand-held GPS unit.

Given that most of the prime wetlands were located on private land, and that property access permission was obtained for 54% of the study area, complete field verification of prime wetland boundaries was not possible. The following table summarizes the field delineation effort.

Percent Coverage of Prime Wetlands During 2006-7 Field Surveys					
Town of Meredith NRI II					
Name	Prime Wetland Acres~	Perimeter (ft)	Perimeter (ft)	% covered by GPS coverage	% with Permission
Hawkins Brook	127.6	40210.3	N/A	0	
Dolloff Brook	192.2	62061.2	12415.587	20	63.7
Blake Brook	143.2	103170.4	38897.644	37.7	42.4
Hatch Brook*	213.0	71209.5	70555.43	99.1	93.4
Mill Brook	132.9	56019.7	2416.86	4.3	24.9
Page Brook^	281.4	96791.9	39275.047	40.6	38.4
Stoney Brook	207.2	53194.7	33573.114	63.1	72.9
~ except for Hawkins Brook, acres are for the final NRI II determination in 2006-2007					
* Hatch Brook delineations also occurred along Route 104 where permission not sought					
^ Page Brook permission was expanded in mid 2007 for a one-time visit to the Wilds Property					

Table 4. Prime Wetland Mapping Effort

In all areas without property access permission, roadside surveys were conducted for the purpose of field checking wetland boundaries and wetland condition. The latter included observations of wildlife, water levels, cover types, roadway impacts, and dredge & fills. Digital photographs were taken off-road or along the roadside and cover types were checked against what had already been mapped. This process usually resulted in small changes to the wetland boundary as well as changes to the mapped cover types as exemplified below. Notations were made on all wildlife species, dominant plant species, habitat features, soils types, rare & endangered species, and exemplary natural communities. In areas where coniferous forest cover impeded a clear interpretation of aerial photographs, the greatest error in the remote mapping regime under the Phase I NRI was found to be present.

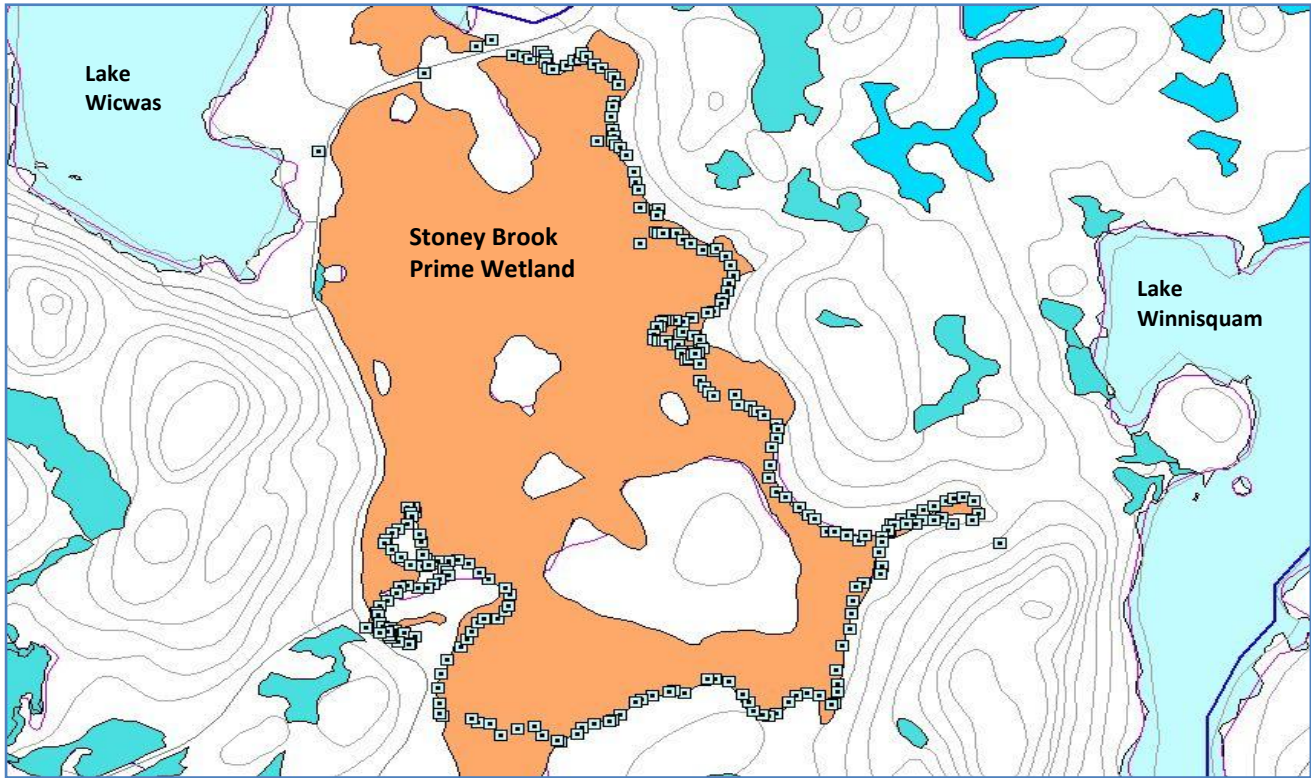


Figure 6. Changes to the Stoney Brook Prime Wetland.

The orange area indicates the wetland boundary as determined by aerial photo during the NRI Phase I process. The GPS points (BLUE) indicate where the actual wetland line was as determined in the field on May 12, 2006. The GPS points cutting across the bottom of the wetland do not indicate the southern edge of the wetland, rather, they were placed near a property boundary beyond which access was denied. The Chemung roadside wetland boundary on the west side was visibly accurate and did not require further GPS notations.
{North is up in this map}.