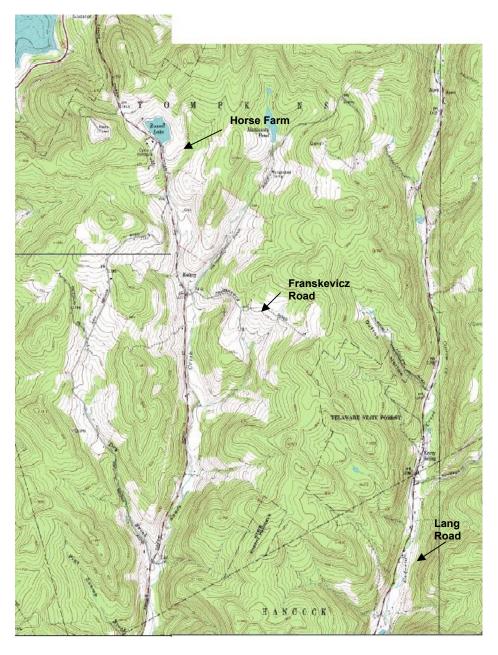
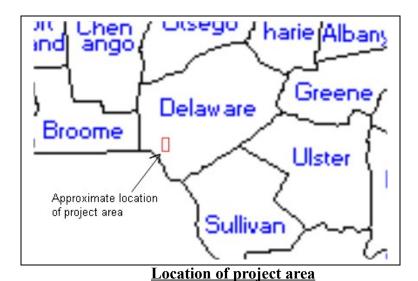
Report of Eagle Counts Conducted in Delaware County, NY March 5-14, 2009

The Delaware-Otsego Audubon Society conducted a hawk and eagle count in southern Delaware County in early March 2009. This effort was part of a larger project to research where Golden Eagles concentrate during migration in New York State.

Available data suggested that eagles concentrate in an area between Hancock and the Cannonsville Reservoir during spring migration. The Upper Delaware River region is a major wintering site for Bald Eagles. Occasional wintering Golden Eagles are also sighted in this area.



Map of project areas with observation sites



Methods

A one-week spring count was planned in this area in the peak Golden Eagle migration period. In preparation for scouting count sites, topographic maps were studied for geographic features that might concentrate raptors, and for open areas where viewing might be possible in this heavily forested area. Three sites were chosen during a scouting trip in February 2009. These sites form a NW to SE transect 4.2 miles across with an effective counting area approximately 5.5 miles wide. The transect orientation was based on the generalized northeasterly movement of migrating raptors expected in the northeast in spring. Birds moving NE would be perpendicular to the transect.

Accounts for reporting data were set up for each of the sites on the Hawk Migration Assoc. of North America's (HMANA) *hawkcount.org* web site, under the names: *DOAS - Horse Farm; DOAS - Franskevicz Road*; and *DOAS - Lang Road*. Details on all sites, including coordinates, can be found at *hawkcount.org*.

Volunteer observers from the Franklin Mountain Hawk Watch covered the sites from March 8-14. Additionally, two sites were covered on March 5 and 7.

Counters were instructed that all raptors purposefully moving east and north should be considered migrants and recorded as such. Counters were asked to use their judgment about which birds were not migrating based on flight direction, the bird's behavior, and their personal experience counting migrating raptors elsewhere. Non-migrating birds were deemed "local" or "not migrating". These birds were not included in the count but were recorded in separate notes.

On several days, raptors of different species were seen following a NW flight path. Even though this flight direction was not expected, the behavior and variety of species following the same path strongly suggested migratory movement. It included hawks and both species of eagles. These birds have been included in the tally as migrants.

Standard HMANA data forms and codes were used to record weather data and sightings. Data was entered into the hawkcount.org database.

2-way radios were used at the Franzkevicz Road and Horse Farm sites to monitor individual eagles of both species and thereby determine if they were being seen and recorded at both sites. The Lang Road site did not have radio reception or cell phone service. No attempt was made to determine how many of the migrating hawks or vultures were counted at multiple sites.

In addition to using radios to avoid double counting eagles, topographic maps were provided to the counters. Volunteers were instructed to mark these maps with all eagle flight paths, and to note times of passage and the age of the birds. Age classes were limited to "adult", "juvenile" or "unknown". These maps were examined after the counts concluded, and eagles determined to be counted at multiple sites were only included once in the transect total. Based on flight path maps and the judgment of the project compiler, some individual eagles were changed from "migrant" to "local" in the *hawkcount.org* database after the count concluded.

Results

The total of all migrating raptors per site were 104 at the Horse Farm, 145 at Franskevicz Road, and 86 at Lang Road. Even though Franskevicz Road had the most raptors, a number of eagles coming from due south were seen at the Horse Farm that were missed at Franskevicz Road because they were below the line of sight of the observer there. This may also be true of eagles that were first seen behind Franskevicz Road from the Horse Farm. Those birds may have passed on the east side just below the ridge.

A Golden Eagle seen flying south on March 8 at Franskevicz Road was not included in the count. Another Golden Eagle seen north of Lang Road when the site was not covered also was not included.

A number of Bald Eagles judged to be local birds were not included in the count. Not all were noted separately by the counters, or identified by age. There were at least 17 birds that fell into the "local" category. This included a pair observed moving steadily north. After some harassment of the female by the male, they both grabbed feet and tumbled. They landed, copulated and continued moving north. It is possible these birds were migrating.

Three eagles moving north could not be identified and were recorded as Unidentified Eagles.

Findings

The total number of Golden Eagles in the area during the 9-day count is considerably higher than what was recorded at other sites this far north. The number of Bald Eagles is much higher than expected and we know of no other count sites in the northeast where they are found in such concentration.

It appears that this location in lower Delaware Co., NY is a significant corridor for migrating eagles in spring, although additional observations are necessary to confirm this. Eagle totals for several other northeastern hawk watches for the same period are included below for comparison purposes.

DOAS SPRING 2009 EAGLE SURVEY

		GE also			BE also				Adjusted		
		seen at Fz	Adjusted		seen at Fz	Adjusted		Total	total		
Site	GE total	Rd.	GE total	BE total	Rd.	BE total	UE total	eagles	eagles	Total Raptors	Days/Hours
Horse Farm	16	-8	8	25	-8	17	3	44	28	104	9/55.25
Fz Rd	17		17	33		33	0	50	50	145	9/56.5
Lang Rd	7	-1	6	17	-1	16	0	24	22	86	7/48.5
Transect	40	-9	31	75	-9	66	3	118	100	335	9/67.75*

^{*}At individual sites, coverage may have started earlier or ended later. At least one site was covered for 67.75 hours over 9 days.

COMPARISON OF SELECTED HAWK WATCH SITES FOR PERIOD OF 3/5-3/14/09

Site	Location	Hours	GE total	BE total				
Delaware County Transect	Tompkins & Hancock, NY	67.75*	31	66				
Braddock Bay	Hilton, NY	39	1	7				
Derby Hill	Mexico, NY	58	10	22				
Ripley Hawk Watch	Ripley, NY	10.5	0	4				
Allegheny Front	Central City, PA	68.5	25	8				
Tussey Mountain	State College, PA	75.75	111	22				
*Avg coverage per Delaware Co. site = 53.4 hrs.								