

Given the nature of avian migration in New York and along the Great Lakes shorelines, passage rates are expected to be slightly higher at the St. Lawrence Windpower project area in spring than in the fall. A radar study conducted near the Lake Erie shoreline in New York (Chautauqua) reported passage rates approximately 1.5 times higher in spring than in fall (Table 7). Additionally, passage rates at the St. Lawrence Windpower project area may be influenced locally by the close proximity of the radar unit to the shoreline (<1.5 km). Though this distance was recommended by NYSDEC and USFWS, passage rates may be lower further inland where actual turbine construction is proposed. Despite higher than average passage rates near the shoreline, collision risk to migrants within the project area is expected to be low given the average flight height and proportion of targets passing within the zone of risk.

Table 7. Results of radar studies at proposed and existing wind project sites in the U.S.

Site	Passage Rates (t/km/hr)		Mean Flight Height (m)		% Targets below 125 m		Mean Flight Direction	
	Fall	Spr	Fall	Spr	Fall	Spr	Fall	Spr
	St. Lawrence Windpower, NY (this report)	346		490		7.7		209.2
Dairy Hills, Wyoming Co., NY (Young et al. 2006)	170	234	466	397	10	15	180	14
Flat Rock, NY (Mabee et al. 2005)	158		415		8		184	
Chautauqua, NY (Cooper et al. 2004a,b)	238	395	532	528	5	4	199	29
Prattsburgh (1), NY (Mabee et al. 2004, 2005)	200	170	365	319	9	18	177	18
Clinton County, NY (Mabee et al. 2006)	197	110	333	338	12	20	162	30
Marble River, NY (Woodlot Alternatives 2006a,b)	152	254	438	422	5	11	193	40
Jordanville, NY (Woodlot Alternatives 2005a, b)	380	409	440	371	6	21	208	40
Prattsburgh (2), NY (B. Roy, pers. comm. 2006)	193	277	516	370	3	16	188	22
West Hill, NY (Woodlot Alternatives 2005)	732	160	664	291	3	25	223	31
High Sheldon, NY (Woodlot Alternatives 2005)	197	112	422	418	3	6	213	29
Fairfield Top Notch, NY (B. Gary, NYDEC, pers. comm.)	691	509	516	419	4	20	198	44
Searsburg, VT (Roy and Pelletier 2005a, 2005b)	178	404	556	523	4	6	203	69
Sheffield, VT (Roy et al. 2005)	109	199	564	522	1	6	200	40
Martindale, PA (Plissner et al. 2005)	187		436		8		188	
Casselman, PA (Plissner et al. 2005)	174		448		7		219	
Mount Storm, WV (Young et al. 2004)	199		410		16		184	
Mean	262	269	470	410	6.5	14	195	34

Note: Some values are approximations based on the limited information provided in the report or averaged over more than one sampling location (e.g., Flat Rock, Mount Storm).