

# Roads and Habitat Connectivity in Dummerston: Preliminary Analysis

Roads and houses divide the landscape of Dummerston into fragmented blocks of contiguous habitat. The ability of an animal to cross roads to move from one of these blocks to another depends upon a number of factors. In 2007, the Dummerston Conservation Commission worked with a volunteer, Andrea Durant, to survey the undeveloped sections of road more than 500 feet in length. This is believed to be a minimum distance that some species, such as black bear, need. We hoped to learn which of these segments are likely to be the most essential to maintain habitat connectivity, and whether crossing sites could be made safer.

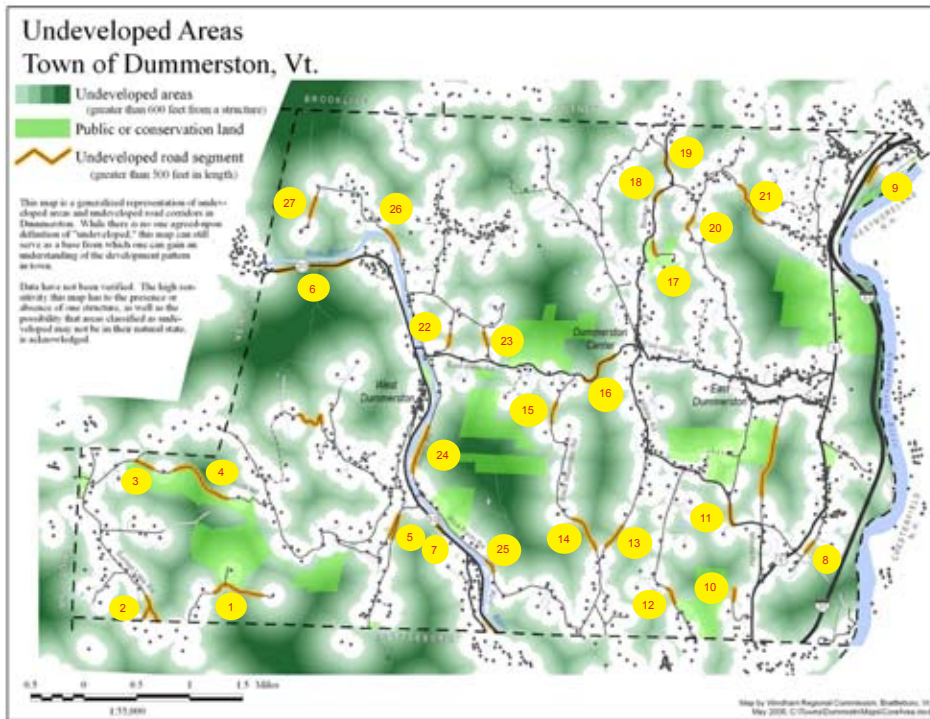
Each segment was rated (from 0 - 10) on its importance based on the size and value of the habitats on either side, whether other access existed, and whether the site was important in linking a number of contiguous blocks. The most important crossing zones were given a 10.

Each segment was then evaluated as a crossing site. The "Suitability Score" is based upon the amount of traffic (score 0-10 as traffic decreases), absence of guardrails (score 1-4), quality of vegetation cover (score 1-4), the topography of the site (score 0-8), and visibility to traffic (score 1-4). The highest possible score for crossing suitability is 30.

The results show that some of the sites that could provide the most valuable habitat linkages, such as site 6, probably are not used as crossing sites by many animals, or only at their great peril.

The Dummerston Conservation Commission will examine the conditions at each of the important crossing sites and consider ways to improve and protect them.

Undeveloped Road Segments



Suitability for Wildlife Crossing

#	Road	Linkage Ranking	Traffic	Guardrails	Vegetation	Topography	Visibility	Suitability Score
1	Sunset Lake	6	5	4	3	6	4	22
2	Hesscock	6	10	4	4	6	4	28
3	Stickney Brook	4	6	4	4	6	4	24
4	Stickney Brook	4	6	4	4	4	2	20
5	Wickopee Hill	4	8	4	4	2	4	22
6	Route 30	10	0	1	4	0	2	7
7	Route 30	6	0	2	3	6	3	14
8	Carpenter	4	8	4	4	4	4	24
9	Kathan Meadow	0	10	4	1	1	2	18
10	Ryan	0	10	4	3	4	4	25
11	Middle	6	3	4	4	3	2	16
12	Kipling	5	6	4	3	6	4	23
13	Dutton Farm	6	8	4	3	3	4	22
14	Black Mountain	8	5	4	4	8	4	25
15	Black Mountain	8	5	4	4	4	4	21
16	East West	10	2	4	4	8	1	18
17	Falk	2	10	4	2	4	2	22
18	Bunker	8	5	4	2	6	3	20
19	Bunker	8	5	4	4	4	3	15
20	Miller Road	8	5	4	4	8	3	24
21	Canoe Brook	8	8	4	4	8	4	28
22	Day	4	7	4	4	4	3	26
23	Green Mountain Camp	5	7	4	2	8	4	25
24	Quarry Road	0	6	4	4	4	4	22
25	Rice Farm Road	0	6	4	4	4	3	21
26	Camp Arden	2	7	2	4	2	3	18
27	Camp Arden	6	8	4	4	6	4	26