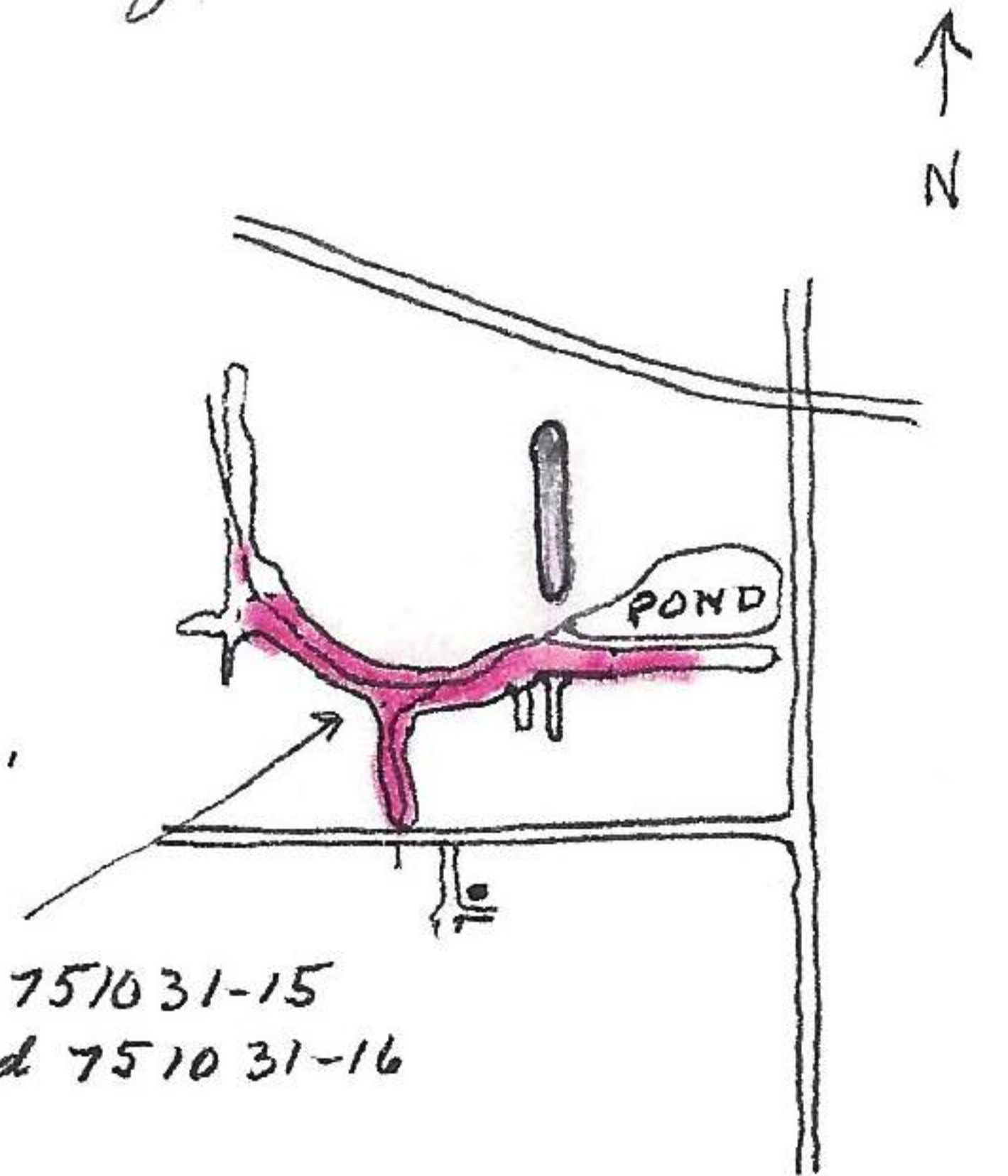


The white excrement ranged from whitewash to an average of 1 inch spacing. On a strand of fence wire the white marks averaged 1 inch apart. The amount of excrement coverage depended on the kind of trees, being greatest in ~~leafless~~ <sup>leafless</sup> elm trees and least under orange-orange trees with green leaves of the usual summer growth. On the basis of the area used by roosting birds according to the distribution of the excrement and the arrangement of roosting birds at night and the position occupied in the trees come up with an area of 4,800,000 cubic feet. The birds occupy an average of 1 cubic foot <sup>or more per</sup> <sup>in the trees</sup> so the above figure represents the <sup>conservative</sup> number of birds in this limited area (red on map). Some birds roosted in

red =  
area  
used as  
roosting.



the white areas beyond the red zone but in only a fraction of the concentration of the red zone. The area <sup>(red)</sup> is mainly a successional community of elm trees with a few orange orange and large cottonwood trees. The areas beyond the red zone are mainly fence rows of <sup>old</sup> orange orange trees. The average height of the elm trees is 30 feet. Most of the orange orange trees are in full summer leaves both in green color and number of leaves while the elms were yellowish green with some tree barren of leaves and the others showing a decrease in leaves and different color than summer conditions. The few cottonwood trees are with leaves but yellowish green. An odor from the excrement is associated with the roosting area and when down wind can be detected easily at 50' and as far as 150' away, in fact the area used can be delimited by odor alone. I first checked the area at 2:30 P.M. and found no evidence of birds except one grackle that was paralyzed in the legs and had remained <sup>in</sup> the area all day. At 3:00 7 redwings passed over area but did not alight. At 4:10 first large flock of 5000 starling pass over but did not alight, 4:15 800 starling passed over but did not alight. At 4:17 the first birds alighted in area (300 grackles) from west. 4:24 3 grackles from west alighted. 4:37 200 flew W over area. 4:40 300 flew E over area but did not alight. 4:41 300 starling flew E over area. 4:42 40 starling and 3 grackles from E and flew over area. 4:56 3000 starling alighted near church E on Westchester. Did not observed from 4:56 to 5:50 and at 5:50 flocks of 20,000 and more were arriving <sup>in</sup> mainly from the W, E and N. Between 5:50 and 6:10 the sky was filled with massive flocks from all directions but mainly from the north where they were arriving at a high elevation which I would approximate at 1000 ft. These birds were mainly starling