

August 3, 2021

REPORT TO THE TOWN OF BELMONT LAND MANAGEMENT COMMITTEE

By: Joe Hibbard

Re: Clearing Invasive Species at the Lone Tree Hill Property

The following narrative summarizes recent work activity between July 19 and August 2, 2021. Each entry lists the date of work, number of hours worked and a brief summary of activities. Photos are on pages 2 and 3.

Monday, July 19, 2021 – 2.0 hours

Cleared approximately 2500 sq. ft. of moderate to light density Glossy Buckthorn (*Frangula alnus*) from Area 7. Clearing also included a Norway Maple (*Acer platanoides*) sapling and some scattered Bittersweet Vine (*Celastrus orbiculatus*). The method used to clear was to cut the stems of the Buckthorn at 12" to 18" above grade. This method assumes that Parterre Ecological will recut the stems again at a future date and apply a systemic herbicide to the re-cut stems.

Tuesday, July 20, 2021 – 1.0 hour

Met with Gabe Seigel of Parterre Ecological to review the previous day's clearing. We agreed to proceed in areas 7 and 9 on the west side of the Pitch Pine Trail. The area has a lot of large Buckthorn plants in fruit, which makes it a priority area for removal. Gabe approved the removal and piling methods employed. We also observed dense Buckthorn stands in Area 2 and agreed that it would also be a good area to prioritize. Areas 7, 9 and 2 are all contiguous with Area 1A and will directly expand the 1A Area cleared with the forest mower.

Monday, July 26, 2021 – 3.25 hours

Cleared approximately 3600 sq. ft. of light to high density Buckthorn growth. Clearing also include some Bittersweet Vine. Met Alexi from Parterre Ecological in the Mill Street parking lot and discussed the meadow area he was there to spray. We agreed that since the Foxtail Grass (*Setaria glauca*) had not set seed yet, it would be good to mow the large areas of Foxtail Grass in addition to herbicide spraying.

Monday, August 2, 2021 – 1 ¾ hours

Cleared approximately 2000 sq.ft. of very dense Buckthorn along Pitch Pine Trail, including an abundance of small seeding Buckthorn. Unlike the adjacent previously cleared areas, there were few native trees and very little native tree regeneration in this area. Perhaps in the future the best management strategy for some areas on the west side of the Pitch Pine Trail, as well as in Area 1A, is regular mowing to gradually deplete the roots of cut Buckthorn.

Note: A preliminary answer to Radha's question about how long the clearing could take can be calculated from this brief experience. About 8100 square feet of light to very heavy Buckthorn were cleared in about 7 hours. Therefore, a reasonable estimate going forward is that one acre of dense Buckthorn can be cleared in about 38 hours of work. Less dense areas could be done more quickly.



View along the Pitch Pine Trail before clearing. Area 7 and 9 is to the left of the trail.



View along the Pitch Pine Trail after clearing on July 19, 2021. Clearing extends about 50 to 60 feet west (left) of the trail.





View looking from the Pitch Pine Trail west across the July 19 clearing work. Brush pile is in the center middle-ground of the photo. Much of the understory vegetation behind the brush pile is Glossy Buckthorn. In the foreground left of the photo is a Bitternut Hickory (*Carya cordiformis*) sapling (bright green leaves) that had been engulfed with the Buckthorn.



View across the July 19 clearing area from the brush pile looking towards the Pitch Pine Trail and the 1A cleared area beyond (bright green).