



Caron Environmental Consulting
978-874-5469
Wetlands • Forestry • Permitting • Habitat Studies

May 4, 2011

Mr. Mark Donohoe
Acton Survey and Engineering
P.O. Box 660
Acton, MA 01720

Re: Possible Vernal Pool
Newtown Road/Acton

Dear Mr. Donohoe:

As requested, I have examined a possible vernal pool adjacent to the above-referenced site. The site is located to the left of 91 Newtown Road, and the possible vernal pool is located just beyond the rear property line. The examination was conducted on May 4, 2011.

The possible vernal pool is located within a bordering vegetated wetland. The area appears to pond for part of the year, probably up to a depth of about 12 inches, although much of the area is shallower. The pool and most of the surrounding uplands are forested. There is lawn within about 30 feet of the pool on the abutting property. It appears that the area has been historically disturbed (i.e. there are tire ruts leading into it) and was likely agricultural land, or at least cleared in the past.

On May 4 I examined the area looking for indicators that the pool functions as a vernal pool. I focused on looking for the key vernal pool indicators as described in the Natural Heritage and Endangered Species Program's *Guidelines for the Certification of Vernal Pool Habitat*. During the site visit I encountered a single adult wood frog and found wood frog larvae in the pool. The wood frog larvae were not extremely abundant, and I was finding only one or two in every few dip nettings. No wood frog egg masses were observed. In addition, no adults, larvae, egg masses or vocalizations of any other obligate or facultative species (as defined in the above guidelines) were observed.

Based on these observations, the area could be classified as a vernal pool. It is my observation, however, that conditions in the pool are marginal at best. The very low population of wood frog larvae may indicate that the pool is used by a minimal number of frogs, or that conditions in the pool result in significant mortality. In productive vernal pools I would expect to see dozens of larvae present in the dip net. In addition, I was surprised to see how much the pool had already dried up despite the wetter than normal spring and this year's above-average snowmelt. I suspect that in many years the pool may dry up before the wood frog larvae can fully develop. If this is the case this pool could actually function as a population sink.

If you should have any questions in regards to this matter, please feel free to contact me.

Very truly yours,


Charles E. Caron



Photo 1: Conditions in the Possible Vernal Pool on May 4, 2011



Photo 2: Wood Frog Larvae found in the Possible Vernal Pool on May 4, 2011