



July 15, 2010

Ms. Mary Jarvis,  
Director of Planning, Land Development  
Urbandale Corporation  
2193 Arch Street  
Ottawa, Ontario  
K1G 2H5

Dear Ms Jarvis:

**RE: KNL Lands – North of the Beaver Pond**  
**Ecological Site Assessment – Blanding’s turtle and American ginseng**

I have completed an updated ecological site assessment of the lands north of the Beaver Pond and adjacent lands, with an emphasis on the threatened Blanding’s turtle and endangered American ginseng.

### ***Blanding's Turtle***

Blanding’s turtles are experiencing population declines primarily due to a loss of wetland habitat, exacerbated by their low recruitment rates and delayed sexual maturity (they can be over 80 years old and take up to 25 years to reach sexual maturity). Nest predation (raccoons, skunks, foxes and coyotes), road mortality and the illegal pet trade all have a negative impact on overall survivorship and population stability (COSEWIC, 2005). The relatively large home ranges of adult Blanding’s turtles among several connected lakes, rivers, streams, marshes or ponds have also likely contributed to population declines through increased adult mortality from disturbances in adjacent upland habitats among wetland parcels (COSEWIC, 2005). Blanding’s turtles of all ages occur primarily in shallow water, with adults and juveniles showing slightly different habitat preferences. Adults are generally found in open or partially vegetated sites, whereas juveniles are more reclusive by nature and prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. The Blanding’s turtle nests in a variety of loose substrates including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow flowing streams (COSEWIC, 2005).

Blanding's turtle have been observed in the Kizell Pond west of Goulbourn Forced Road and along the First Line Road allowance further to the west. The Beaver Pond and east portion of the Kizell Pond were examined for Blanding's turtles in the late mornings of July 8<sup>th</sup>, July 9<sup>th</sup> and July 14<sup>th</sup>. Weather conditions were good for turtle observations as air temperatures ranged from 27 to 32° C under sunny to partly cloudy skies and calm winds. No Blanding's turtles were observed. Painted turtles were observed on rocks and/or logs during each field survey, along with a snapping turtle in the open waters of the east portion of the Beaver Pond. Snapping turtle is a species of special concern but not covered by the Species at Risk legislation. There is no open water in the central and west portions of the Beaver Pond among a thick cattail marsh, with extensive open water in the east third of the Beaver Pond. Mostly rocks, with a few logs provide potential sunning areas around the perimeter of the open water.

Although no Blanding's turtles were observed during these field surveys, they are known from the Kizell Pond system and could utilize the Beaver Pond. The proposed residential development will offer good protection for these areas with an undisturbed setback, other than an existing stonedust recreational pathway, between the Beaver Pond and the south limit of development to the north of the Beaver Pond. Although not part of the residential development north of the Beaver Pond, the design for upgrading of Goulbourn Forced Road should allow for easy access for turtles and other wildlife between the Kizell and Beaver Ponds.

As indicated above Blanding's turtles utilize upland habitat to move among wetland parcels and for nesting. However the rock ridge north of the beaver pond is not suitable nesting material for Blanding's turtle. Although Blanding's will travel extensively over upland habitat between wetland parcels and to nest there is no suitable destination habitat to indicate Blanding's turtle would use the upland area north of the Beaver Pond, instead exchanging among and within the Kizell system. In field surveys dating back to 2002 no turtles have been observed on the upland habitat north of the Beaver Pond.

### ***American Ginseng***

American ginseng populations are under extensive pressure from illegal harvesting, logging, habitat loss and degradation, and deer browsing (OMNR, 2008). American ginseng plants are generally between 20 and 70m tall, consist of an elongated taproot and a stem ending in a group of leaves that are connected to a central point and arranged in a circular pattern (OMNR, 2008). American ginseng requires rich, moist, undisturbed and relatively mature sugar maple-dominated deciduous woods in areas of circumneutral soil such as over limestone or marble bedrock (COSEWIC, 2000). Colonies are often found near the bottom of gentle slopes facing south-east to south-west; a warmer microhabitat that is usually well-drained and species rich. The forest canopy is dominated by sugar maple, white ash, bitternut hickory and basswood (COSEWIC, 2000). Harvesting and loss of canopy cover are major threats to American ginseng.

Field surveys for American ginseng took place on July 9<sup>th</sup> and 14<sup>th</sup>, 2010. American ginseng blooms in early summer and flowers would have been visible during these July field surveys. The lands north of the Beaver Pond were searched for six hours. An emphasis was placed on south

facing slopes dominating by sugar maple, with moist habitat and a representation of plants commonly found with American ginseng including white baneberry, blue cohosh and false Solomon's seal (OMNR, 2008). Blue cohosh was abundant in many areas, with white baneberry common. In addition, as butternut is often found where American ginseng grows, the areas supporting butternut trees were also carefully surveyed.

Although suitable habitat appears to exist for American ginseng at the base of the slope north of the Beaver Pond, no plants were observed on July 9<sup>th</sup> or 14<sup>th</sup>.

### **References**

COSEWIC. 2000. COSEWIC assessment and update status report on the American ginseng *Panax quinquefolius* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 17 pp.

COSEWIC. 2005. COSEWIC assessment and update status report on the Blanding's Turtle *Emydoidea blandingii* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. viii + 40 pp.

Ontario Ministry of Natural Resources. 2008. American Ginseng. A Landowner's Resource Guide. Ontario Species at Risk. 16 pp.

Please call if you have any questions on this updated Ecological Site Assessment.

Yours Sincerely,  
**MUNCASTER ENVIRONMENTAL PLANNING INC.**



Bernie Muncaster, M.Sc.  
Principal

\\beaversarletter