

SUMMARY AND RECOMMENDATIONS

Potentially suitable habitat for the majority of the Species at Risk in the County of Haliburton appeared to be consistently located in the southern and western portions of the County. To examine this quantitatively, a grid of 2500m² squares was overlaid onto the County and the area of suitable habitat for each species within each square was calculated. To standardize the results across species, the areas were converted to percentages of total suitable habitat within the County of Haliburton.

The peregrine falcon, stinkpot and Engelmann's quillwort were not included in this analysis as the methodology utilized to identify their suitable habitat was not compatible.

Weighing each of the Species at Risk equally, percentages for all species were averaged for each square, thereby highlighting areas used by a multitude of Species at Risk or areas that represent the majority of habitat for a single Species at Risk (See Figure 1).

In retrospect the results are not overly surprising. Habitat loss is one of the primary causes for species decline and much of this is driven by human alteration of the environment. As the human population increases, development has been moving steadily north. The Canadian Shield represents a northern boundary for many species, particularly those associated with circumneutral soils or warmer climes. The transition zone between the Canadian Shield and the limestones to the south transects the southern portion of the County of Haliburton. With much of their habitat lost in the south and no suitable habitat to the north the remaining natural areas of southern Haliburton provide a last refuge.

The distribution of Crown Land captures some of the core areas of potentially suitable habitat, specifically in the Townships of Anson/Lutterworth and Snowdon/Glamorgan (See Figure 1). However, there is also a significant amount of potentially suitable habitat for many Species at Risk that is located on private land. Areas such as south of Kashagawigamog Lake, the Beech Lake chain and south of Elephant Lake all represent potentially suitable habitat for a multitude of Species at Risk. It is interesting to note that the area south of Kashagawigamog Lake and the Maple/Beech/Green Lake chain were also identified as priority stewardship areas in the



Conservation Blueprint (Henson, Brodribb, & Riley, 2005) (Wichert, Brodribb, Henson, & Phair, 2005).

The golden-winged warbler and milksnake are Species at Risk that have a preference for old fields or early successional scrub areas. Open areas such as these are very limited in the County of Haliburton and are typically associated with old farmlands located off the Canadian Shield. This habitat type is continuing to disappear due to natural succession and development. Some of the better concentrations of this habitat type are located around Minden; Maple and Beech Lake; south of Kashagawigamog Lake and north of Cardiff. Preservation and maintenance of open areas in the County of Haliburton represent an opportunity for the Haliburton Highlands Land Trust.

Another significant habitat characteristic located in the southern portion of the County is the diversification of habitat. Specifically in the southwest, the County of Haliburton has a relatively high concentration of marshes and fens/bogs. This same area has the greatest concentration of rocky barrens as well as some of our limited ecosites such as the pine dominated forests (Heaven, 2007). A mosaic of habitat types such as this can provide habitat for a number of Species at Risk simultaneously, possibly explaining why the area is highlighted in the SAR summary analysis.

Documented element occurrences of Species at Risk are limited in the County of Haliburton with an average of less than 10 per species. More documented element occurrences in the County would allow the Haliburton Highlands Land Trust to further refine the habitat preferences of Species at Risk and highlight those habitats with known occurrences. To this end it is recommended that the Haliburton Highlands Land Trust establish a mechanism for collecting and verifying sightings of Species at Risk. Glenside Ecological Services Limited developed and provided an MS Access database to the HHLT to capture observations in a format compatible with the NHIC database however the HHLT must still implement a reporting mechanism for the public to utilize (i.e. a hotline, website, email address etc.)

In regard to individual Species at Risk, critical habitat for Engelmann's quillwort has been defined in the County of Haliburton and the adjacent lands to this habitat are privately owned. Therefore there may be opportunities to enhance the protection associated with this species.



It must be noted that the maps of potentially suitable habitat provided in the original report, were produced based on the best available spatial data and have yet to be ground verified. The environment is changing continuously and ground verification is required to determine whether the habitat is still suitable and whether the related Species at Risk is currently utilizing the subject property. Ground verification is highly recommended and sites can be prioritized based on historical sightings of SAR (NHIC database, BBA, local knowledge) and/or the limited availability of habitat in the County of Haliburton.

The maps provided in the original report are an excellent reference when assessing a property for acquisition or other conservation efforts as they provide direction on which Species at Risk may be found on a subject property: information that will allow the Haliburton Highlands Land Trust to scope and temporally plan assessments to optimize sightings of Species at Risk.

Further, the maps provided in the original report will help the Haliburton Highlands Land Trust to be proactive in terms of education and private landowner contact. By focussing on areas of Species at Risk habitat concentration, or limited habitats, the Haliburton Highlands Land Trust can approach the relevant landowners and provide direction in regard to habitat maintenance, protection and/or rehabilitation.



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