

Kannakko, Kris (MNR)

From: Gaweda, Joanna (MNR)
Sent: December 13, 2006 10:41 AM
To: Coulson, Daryl (MNR)
Cc: Punt, Kirby (MNR)
Subject: first take ALVAR facts to MAH
Attachments: ALVAR Habitat Description.doc

Hi Daryl, I would appreciate your feedback on the background 'facts' I've pulled together and the recommended policy components (we had already shared in March with McNab). In my folder on Common drive I'll place the items we had provided to the Twp in the spring. So far as I know they did not contact us for a shapefile of Alvar or other SWH components and as we know they did not include on the draft Appendix or Schedules...

Please feel free to change this draft to your liking as you likely have much more information than I was able to draw on. I had access only to DSS (sparce), Miller draft submission (site specific), draft SWH components table-SWHTG...not great.

Again I've promised this and OP comments to MAH by Friday

Thanks Daryl
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DRAFT ONLY :

Description of Braeside Alvar:

The Braeside Alvar has a variety of characteristics that make it a unique feature in the Township and in Renfrew County. Alvars are rare in Ontario and globally, occurring only near the Great Lakes (ie. in areas of south eastern Ontario such as Bruce Peninsula, and globally only in Scandinavia. Of the documented alvar habitats in North America, the Braeside Alvar is the most northerly example, with its own unique microclimate and adaptations.

The Alvar is associated with an ancient beach ridge, geologically different from the rest of the Township of McNab. It is a groundwater recharge area, contributing to the shallow and deep aquifer within this area of the Township. It is a source of numerous coldwater springs situated around its perimeter and discharging to several stream systems. The vegetation communities consist primarily of pine barrens? Scrubby woodland? abandoned agricultural fields?. The quality or successional stage of the alvar habitat throughout its extent varies, with some areas relatively disturbed by various land uses (ie. Golf course, scattered residential and subdivision development, aggregate extraction, road networks, etc). and other areas still in tact.

The key aspects or characteristics that make the Alvar unique and would score it as Significant Wildlife Habitat are:

- Contain populations of various species of conservation concern (ie. Ones that yet have not been given a SAR status by the Province or Environment Canada) (ex. Copper's Milk Vetch (*Astragalus neglectus*), Ram's Head Lady Slipper (*Sypridedium arietinum*), alvar vegetation communities which are considered rare and extremely rare in Ontario (Natural Heritage Information Centre).
- Alvar contains core winter deer habitat (SWH on its own). Winter deer habitat provides shelter and food for deer during the winter months and is critical to their survival in the area. Deer wintering habitat is characterized by dense, mature conifer forests, with ready access to young hardwood growth suitable for browsing. This habitat is very significant to the deer population because deer herds congregate and are confined within these forest stands, when they are most stressed and vulnerable. Also, the deer winter habitat generally represents the best quality forest habitat remaining in the Township.
- There is high potential that portions of the Alvar function as eastern-hognose snake habitat (threatened status provincially and federally); the snake requires forested land with plenty of downed woody debris, shallow soils, bedrock crevices and other ground level structure; pine forests with a low density of trees seem to provide the best habitat conditions during autumn and for winter hibernation; Alvar contains largely undisturbed forest units > 5 ha in size preferred by the snakes.

?Site specific information:

The MNR does not have access to aerial photography more recent than 1987. Although MNR has provided general boundaries of the feature (see appendix), the presence/absence and quality of the alvar features needs confirmation of a case by case basis prior to development taking place.

Although research on alvar habitats is scarce in Ontario, sources such as the Federation of Ontario Naturalists, NHIC and select universities could be contacted for more information.

To date, site specific ecological information has been collected by consultants in relation to site specific *Aggregate Resources Act* and *Planning Act* applications for the expansion of the Braeside Quarry. MNR has had limited opportunity to collect information about the feature as it is primarily in private ownership. The portion of the Alvar in municipal ownership (ie. Contribution towards parkland or open space) and accessible has been disturbed (ie. Not in tact).

Potential Development Effects:

Alteration of the following factors:

- Vegetation removal (tree cutting, pedestrian traffic in areas with sensitive plants, deer thermal cover or ground structure changes)
- Hydrologic changes (long term disturbance of groundwater through water takings and discharge, drainage and road networks, clearing of largely dense vegetated areas,)
- contamination of groundwater?

Suggested policy approach:

MNR's recommendation to Township for addressing SWH in OP:

We recommend that Council ensure that the following are addressed in the OP:

- 1) Include a general policy recognizing the value of wildlife and supporting the protection of significant wildlife habitat, such as: "Council recognizes the importance and value of wildlife and supports the protection of significant wildlife habitat". Such a statement may be added to a section dealing with the overall objectives of the plan and could include a general statement about all environmentally sensitive areas.
- 2) Identify the general location of known habitat of species of conservation concern and other significant wildlife habitat on resource maps (ie. **As overlays to the Schedules**) and incorporate policy to **contact MNR for technical advice when development or site alteration occurs near these features**. An assessment may be required and or conditions of development may need to be implemented in these areas. Also the OP should recognize that as habitat quality and wildlife use patterns change, the mapping will be updated **without a need to amend the OP**.
- 3) Include a policy that generally requires applications to be supported by a **scoped site-specific assessment in areas identified to have potential to be significant wildlife habitat**. If significant wildlife values are found, in some instances more detailed assessment may be required and or conditions of development may need to be implemented. MNR may be contacted for technical advice regarding assessments and proposed mitigation measures.
- 4) Include a policy that generally requires **applicants to provide detailed/quality information** regarding natural heritage features during the application process.

- 5) Include a policy ensuring appropriate development controls to protect seasonal concentration areas, rare or specialized habitat, wildlife movement corridors, the habitat of species of conservation concern and species of special concern.
- 6) Include a policy that natural corridor linkages will generally be protected in order to maintain, restore and/ or improve the diversity and connectivity of natural features and the long-term ecological function and biodiversity of natural heritage systems.

We are of the opinion that these recommendations have not been incorporated in the current Draft OP to adequately address the SWH component of the PS 2005, with respect to the Braeside Alvar in particular. We would look for MAH support to ensure that a special policy is included in future Drafts of the OP.

Other Potential 'Provincial Concerns':

Through the pre-consultation meeting in support of the proposed expansion of the Braeside Quarry, it has come to our attention that the preliminary hydrogeological assessments of the aquifer below the alvar feature could be contaminated with bacteria. The existing land uses (ie. Residential, golf courses? etc) could be contributing. It is not clear whether the residential development and associated well location and drilling have been carried out in accordance with MOE's guidelines and best practices. It is clear that considerable residential development has taken place by way of severance without hydrogeological assessments and control of water and residential septage.

We recommend that it is important to approach MOE with the question 'is it appropriate to continue development by way of severance or subdivision on individual services, which will lead to more 'raised septic systems' and more wells (potentially at risk). Is this a source water protection issue in the making?