

NAME McMahon Bluff Escarpment Forests		MAP NAME Wellington	MAP NUMBER 30 N/14	UTM REF. 370690
COUNTY, DISTRICT or REGIONAL MUNICIPALITY Prince Edward		LAT. 43° 57' N	LONG. 77° 01' W	ALT. MIN. - MAX. 75m - 130m
LOCALITY 1 km south of Black Creek		1:50,000 N.T.S. MAP SHOWING AREA BOUNDARIES (= Vanderlip Hill)		
TOWNSHIP South Marysburgh	LOTS	CONCESSIONS		
AREA 196 acres	79 ha			
OWNERSHIP private				
ADMINISTRATION no information				
FOREST REGION AND DISTRICT L.1	SITE REGION AND DISTRICT 6 - 15			
MNR REGION AND DISTRICT Eastern / Napanee	CONSERVATION AUTHORITY Prince Edward Region			
AERIAL PHOTOGRAPHS		BASE MAP: 438771		
YEAR	ROLL	FLIGHT LINE	NUMBERS	
78	12	4367	93 - 95	

PHYSICAL AND BIOLOGICAL FEATURES

This site is a small outlier from the limestone plain which presents an escarpment and 'mesa' that support many natural features which are representative of the Prince Edward Peninsula Physiographic Region. It is located about 1 km south of the mouth of Black Creek valley. It is privately owned by several owners.

The site's landforms are dominated by the presence of a very well developed 'mesa' which rises above the surrounding basin by about 30 metres. It has a flat to gently sloping plain, surrounded by moderate to steep scree slopes which lead to a terrace along its northern and eastern sides. There is a vertical seacliff of over 10 metres in height on its eastern side. The soils vary from thin and dry on the mesa, to thicker mesic loams with seepage portions along the slopes and terrace.

The vegetation of the site is predominately under forest cover, but with local successional groves and meadows. The forests of the northern half of the mesa top tend to be dry to dry mesic, deciduous and subintermediate in age. The dominant species are shagbark hickory (*Carya ovata*), white oak (*Quercus alba*), largetooth aspen (*Populus grandidentata*), yellow oak (*Q. muehlenbergii*) and eastern red cedar (*Juniperus virginiana*). The southern half of this mesa has more open, younger, mixed to deciduous groves of trembling aspen (*Populus tremuloides*), largetooth aspen, eastern red cedar, shagbark hickory, hop hornbeam (*Ostrya virginiana*) and others, and included here in its frequent openings are heath and 'alvar' communities of common juniper (*Juniperus communis*), fragrant sumac (*Rhus aromatica*), snowberry (*Symphoricarpos albus*), New Jersey tea (*Ceanothus americanus*), early buttercup (*Ranunculus fascicularis*), woodland sunflower (*Helianthus divaricatus*) and others. The

Ontario Ministry of Natural Resources

DATA SHEETS ATTACHED		MAJOR INFORMATION SOURCES	
PHYSICAL DESCRIPTION	<input type="checkbox"/>	SUMMARY SPECIES LISTS	<input type="checkbox"/>
VEGETATION SUMMARY	<input type="checkbox"/>	PHYSICAL FEATURES MAP	<input type="checkbox"/>
EVALUATION SHEET	<input type="checkbox"/>	VEGETATION MAP	<input type="checkbox"/>
COMMUNITY DESCS.	<input type="checkbox"/>	BIBLIOGRAPHY	<input type="checkbox"/>
COMMUNITY COMP. LISTS	<input type="checkbox"/>	PHOTOGRAPHS	<input type="checkbox"/>
OMNR (files of parks, lands, timber), Regional Life and Earth Science report, International Biological Programme (check sheet), Macdonald (on-site surveys, airplane fly-over)			

EVALUATION AND PRIORITIES

This is a Regionally Significant ANSI which presents a very good example of escarpment landforms, vegetation and biota.

DATE COMPILED 27 May 1986	COMPILED Ian D. Macdonald
------------------------------	------------------------------

30 N/14 370690

escarpment slopes on the interior side have a mixture of successional grove and remnant forest communities, but those on the lake side support mesic, intermediate aged, deciduous forests of sugar maple (*Acer saccharum*), northern red oak (*Quercus rubra*), white ash (*Fraxinus americana*), American basswood (*Tilia americana*) and others. The terraces support intermediate aged deciduous forests of sugar maple, American beech (*Fagus americana*), northern red oak and American basswood, with local coniferous groves of eastern hemlock (*Tsuga canadensis*), eastern white pine (*Pinus strobus*), eastern white cedar (*Thuja occidentalis*) and paper birch (*Betula papyrifera*), accompanied by the above species. The cliff face along the site's eastern and northern portions are essentially barren of vegetation cover.

The flora of this site presents a flora which has distinctive southerly or Carolinian affinities and includes several 'alvar' species. Additionally, it has several provincially and regionally species in its complement. Most notable among these are the following: provincially rare - yellow oak (*Q. muehlenbergii*); regionally scarce to occasional - golden alexanders (*Zizia aurea*), Seneca snakeroot (*Polygala senega*); otherwise interesting - fragrant sumac (*Rhus aromatica*), snowberry (*Symphoricarpos albus*), New Jersey tea (*Ceanothus americanus*), early buttercup (*Ranunculus fascicularis*) and woodland sunflower (*Helianthus divaricatus*). No information is available about the fauna of the site.

Disturbances to the site include cutting, farming and habitation. The forests atop the mesa appear to have been thoroughly cut over in the past half century, with those of its southern half being more recently and intensively cut, probably for farming purposes. Additionally, fire appears to have affected the mesa forest and grove communities in the past. The forests of the slopes and terraces have been more lightly cut, but some select cutting is presently proceeding in the southeastern corner of the terraces. The western, interior slopes have been farmed and grazed, and are now in a mid-successional stage of development. Recent construction is affecting the southeastern corner of the terraces with house construction and access road clearance.

The significance of the site rests in its excellent portrayal of the 'mesa' landform, which in this case is virtually the best in the site district, and the associated escarpment flora. The mesa presents a warmer-than-normal microclimate which allows several southerly species and 'alvar' species to exist. The escarpment forests are representative and well developed. As well, the escarpment presents both interior and coastal phases of its features. Additionally, it is adjacent to the Black Creek Valley Marshes and Forests ANSI, and taken together, they would make an excellent, representative unit. This is recommended to be a Regionally Significant ANSI.