

KILLARNEY — LAKELAND, LANDFORM AND HEADWATERS

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Abstract

Ontario's Living Legacy Land Use Strategy (OMNR, 1999) designates 378 new protected areas for the area of the undertaking. As part of the new designations Ontario's Living Legacy Land Use Strategy (OLLLUS) identifies a cluster of protected areas in the vicinity of the existing Killarney Provincial Park. Called the Killarney Signature Site, it is one of nine geographic areas in OLLLUS with land use designations that demonstrate a range of planning approaches to protect and conserve highly significant values. Some of the protection objectives include: protecting the headwaters of the existing park and retaining and enhancing the important natural heritage and special characteristics of the area, including extremely significant tourism and recreation potential that merits increased planning, management and promotion (OMNR, 1999). The Killarney Signature Site designation follows on the four objectives from OLLLUS: 1) provide greater land and resource certainty for forestry, mining and other resource industries; 2) recognize the land-use needs of the resource based tourism industry; 3) enhance fishing, hunting and other recreation activities; and, 4) complete the system of parks and protected areas. This paper will explain the application of the fourth objective to protect and conserve significant areas and ecological functions, including watersheds in the Killarney area.

Introduction

The objective of Ontario's Living Legacy Land Use Strategy (OLLLUS) (OMNR, 1999) is the completion of Ontario's parks and protected areas system aimed at providing a variety of outdoor recreation uses, and protecting provincially significant natural, cultural and recreational environments, in a system of parks (OMNR, 1992).

Signature site planning and the direction for Killarney in OLLLUS (Figure 1) builds on an existing important park in the system of parks in Ontario. Killarney is the closest wilderness class park to the large population and developed parts of the Province.

The clustering of new protected areas around the existing Killarney Provincial Park, and complementary zoning adjacent to the existing Killarney Provincial Park in OLLLUS, reaffirms the intent to represent and sustain natural features of the Georgian Bay eco-region (OMNR, 1992):

- to provide protected areas that are self-contained;
- to use landforms and watersheds as natural limits for area management bound-

- aries; and,
- to protect core ecosystems, in this case, the Killarney watersheds of north Georgian Bay and the eastern terminus of the La Cloche Mountains.

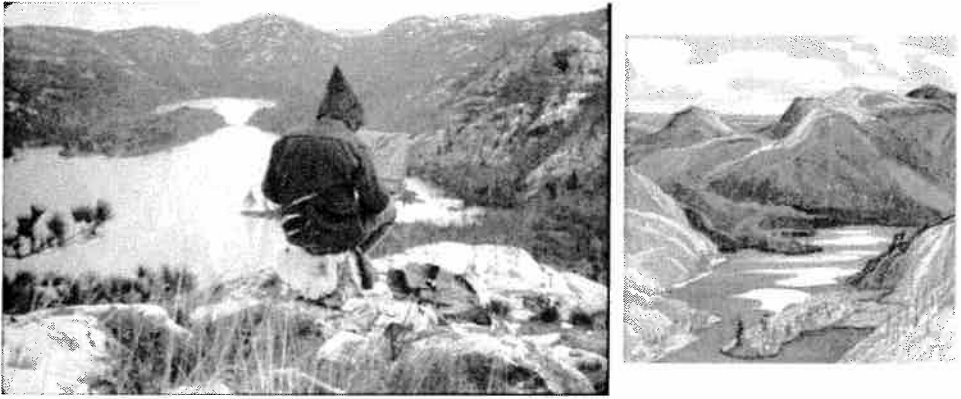
Establishing new protected areas in the Killarney area contributes to completing the park system. The existing Killarney park is smaller than the minimum size standard for a wilderness class park. OLLUS designates a wilderness park addition (P331)¹ to protect core headwater lakes and additional biodiversity in wetlands not represented in eco-districts 5E3 and 5E4 and to make the park larger than the minimum size of 50,000 ha. Other headwater and representative landform and vegetation occurrences in 5E3 and 5E4 are designated as new parks that are contiguous with the existing wilderness park. This will establish one new natural environment (P187) and one new waterway class park (P189) to meet park class targets in eco-districts 5E3 and 5E4 in this part of the Province.

OLLUS designation results in a contiguous protected area in excess of 79,000 ha that is representative of the La Cloche Mountains and north Georgian Bay. The new non-protected area designations in OLLUS, adjacent to the Killarney protected area cluster, include forest reserves and enhanced management areas that provide direction to manage adjacent non park lands to complement the protected areas.

Forest reserves are designations of sites with heritage features in OLLUS in the Killarney area which are adjacent to protected areas and would have been part of the protected area except that lands in these locations were covered by existing mining tenure (OMNR, 1999). Forest reserves have been set aside from forest allocations and are recommended to be added to the park as mineral exploration tenure lapses through normal processes. Policies for forest reserves are similar to policies for new conservation reserves, but mining and related access are allowed in a forest reserve. Commercial forest harvest and peat extraction are not permitted, but most other resource and recreational uses will be allowed, provided that they are consistent with the values that are being protected (OMNR, 1999). There is a minimum of use of the forest reserves in the Killarney area — Killarney North (F219) and Killarney Headwaters (F331). Another designation, enhanced management areas (EMAs), allow existing resource uses to continue (e.g., forestry, mining) and include general recreation uses (e.g., trails for recreation vehicles, hunting, fishing, camping, boating, etc) in areas with special features or values related to adjacent protected areas (OMNR, 1999). EMAs are not protected areas. EMAs in the Killarney area will provide specific focus for the application of guidelines and other planning and management strategies (e.g., FMP). EMAs may lead to modifications (e.g., timing, location, method, access) in resource management practices in order to recognize other land- use values (e.g., E39g Great Lakes Coast values; E211a Killarney East remote access; and E303n Collins Inlet Headwaters on the east side of Killarney park, south of Highway 637).

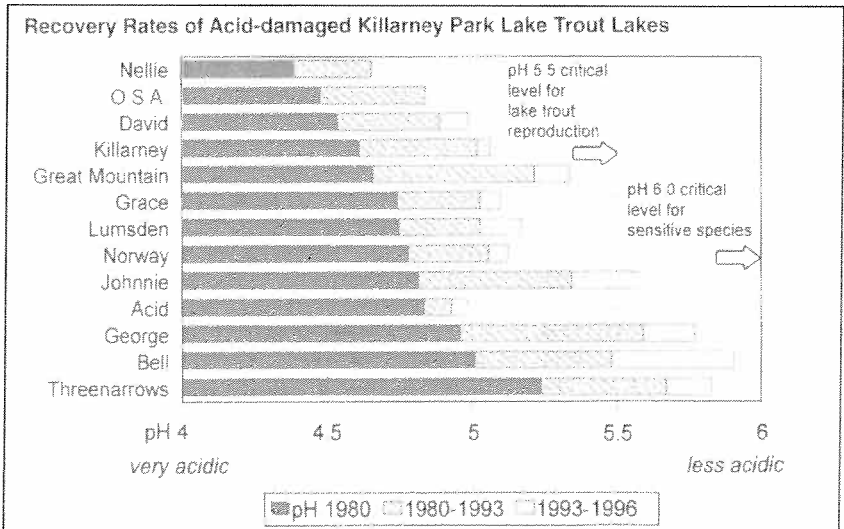
¹Numbers assigned to OLL sites are unique codes that have been assigned to areas to facilitate their identification for consultation, planning and management.

Figure 2. Franklin Carmichael painted in the La Cloche landscape, seen here sketching above Grace Lake; insert painting is a watercolour and pencil on paper image by Carmichael of Grace Lake c. 1933 (Mellen, 1970 and McMichael Canadian Collection, 1985).



The wild and endearing art of the Group of Seven that became internationally renowned is juxtaposed with what some call the “crisis in the rain”. Scientists in the early 1960s found that aquatic ecosystems were degraded by acid precipitation transported from industrial air pollution sources into acid sensitive landscapes of Killarney. Early freshwater ecology research documented the degrading effects of acid precipitation on sensitive aquatic systems. Fifty years of research and monitoring in Killarney has enabled science to describe the degradation and measure natural recovery of aquatic life in inland lakes (Gunn and Sandoy, 2001) (Figure 3).

Figure 3. Recovery rates of acid-damaged Killarney Park lake trout lakes (Gunn and Sandoy, 2001).



Original research done by Dr. Harvey from the University of Toronto and the continuing work of others like Dr. John Gunn at Laurentian University and Dr. Gunner Raddum from the University of Bergen, in Norway, chronicled changes in water chemistry that created acid stressed systems and raised the awareness that there was a global need to reduce industrial sources of acidic pollutants. Ongoing work has documented the natural recovery of acidified lakes after reductions were made in North America.

The attributes of additions to and new provincial parks adjacent to Killarney include head-water limits on the north (e.g., Ti Lakes to Howry Lake) and eastern sides of the park (e.g., Peter Lake to Lake of the Woods) that complement core ecological functions and drainage into the wilderness park. As well, a new park adjacent to the south and west provides an extensive shoreline on north Georgian Bay. These new protected areas also include the natural landform limits of the La Cloche peninsulas that reach into north Georgian Bay with their rugged quartzite coast and islands. The latter include the acidic and nutrient poor rocks of the southern edge of the Canadian Shield in contact with the northern extent of basic Paleozoic rocks of the Michigan Basin. As such, very different geological and geomorphological settings are revealed here on some islands that are partially acidic Shield rocks, with other portions that are neutral and basic chemically as a result of bedrock associated with the Paleozoic rocks of the Michigan Basin. These new areas also enhance representation of biological diversity with landform and vegetation on the southern edge of the Sudbury Eco-District 5E4, and the eastern edge of Eco-District 5E3. The areas are largely roadless with natural character that is very different than the developed and accessed parts of Eco-Districts 5E3 in the west and 5E4 to the north.

Killarney's many natural features support high levels of use. Park visitors are attracted by the rugged beauty and accept restricted access, mostly non-mechanized recreation in the core wilderness park. The existing park has a small 120 site campground that runs at 93% to 97% occupancy in July and August on any given year. The backcountry is also busy with over 60% occupancy of the 180 interior canoe-in and hike-in campsites allocated on a lake-by-lake and trail quota system. The additions to the existing park and new parks have uses that will continue. There is also potential to add more use and manage existing uses to enhance recreation and tourism services in these areas.

Effective and efficient planning of the Killarney Signature Site is required to address the many demands on the Killarney area. The following topics will be addressed in planning:

- continue baseline aquatic research and monitoring-watersheds of wilderness;
- monitor and address high use: George and Bell lakes' entry points and core backcountry destinations;
- balance use and protection with site impact management;
- Integrate wilderness and other park class policies across existing and new parks;
- provide meaningful involvement to address First Nation and Killarney village interests;
- modify adjacent land-use in Forest Reserves and EMAs to complement protected area management; and,
- continue provisions for non-park through access, Hwy. 637, tourism and

forestry access.

Planning for the Killarney Signature Site will use a streamlined process with consultation at each of four stages: terms of reference; background information and management options; preliminary management plan; and approved management plan. This process will produce planning products, as above, to address the different management needs of the existing park and additions, two new parks, forest reserves, and EMAs. The process will clearly define each park's significance, role and classification during a multi-year, topic-oriented planning program. Planning will also provide responsive consultation with First Nations and Killarney communities, provincial and local interests. Applicable OLLUS and park policy direction will be applied to the local situations with zoning for protection, management and development.

References

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