CHAPTER 5: GREENWAYS

We face a more crowded future: urban planners tell us that the population of the Greater Toronto Area will swell from the current four million to nearly six million three decades from now. Development in the cities will become denser, even as the urban edge moves ever outwards. We will spend more than $75 billion on new roads, sewers, water, schools, hospitals, and other infrastructure — just to keep up with demand. Under the relentless pressures of urbanization, it may become increasingly difficult for most people to find a quiet refuge, an unpolluted stream, a place to walk among the trees.

But not only the human habitat is at risk: the rich mix of wild plants and animals with which we share the bioregion are in even more jeopardy. Among the 1,400 species of wild plants in the bioregion, for example, 140 are already limited to a single known location. More than 100 wild species are classed as provincially rare. Streams that leave the Oak Ridges Moraine as cool, clean homes for aristocratic brook trout arrive at the waterfront choked with filth.

Shaping our future to meet the needs of a burgeoning human population and a vulnerable ecosystem is an extraordinary challenge. One of the most promising tools for meeting that challenge is the concept of greenways: corridors of protected green-space throughout the cities and beyond, into the countryside. Greenways do not pit humankind against nature; rather they serve the needs of both, protecting the quality of the natural environment while providing recreation and quiet places close to home.

The idea behind greenways is elegantly simple: link existing green spaces to create interconnected corridors, thereby increasing their usefulness for both people and wildlife. A system of greenways fits neatly in the nine principles put forward by the Commission in its interim report *Watershed* (1990); it proposed that the waterfront be clean, green, useable, diverse, open, accessible, connected, affordable, and attractive.

The greenway concept is gaining prominence, in part because there is a lack of funding for acquiring traditional parklands. Moreover, large blocks of natural landscape close to the urban mosaic are becoming increasingly scarce, and increasingly expensive. Greenways offer opportunities to provide equally good or better recreational

Oakville waterfront

opportunities, as well as vital ecological benefits, at a much lower cost.

Examining the role of greenways in the bioregion builds on the earlier work done by the Commission and others. In its *Watershed* report, the Commission proposed a system of trails along the waterfront, up the associated river valleys, and along the Oak Ridges Moraine. This trail system, buttressed by corridors of green space, would "cast a green net over the Greater Toronto Area, making the public open spaces far more accessible and attractive". The Commission also noted the need for special attention to ecological corridors, particularly along the river valleys that intersect with urban areas.

In her response to the Commission's recommendations, the provincial Minister of the Environment, the Honourable Ruth Grier, endorsed the concept of a Waterfront Trail, and said that it

> will become the Greenway that ties the Greater Toronto Area together from Burlington to Newcastle. . . . the highest land use for all public lands along the water's edge. . . . much more than a four-foot strip of asphalt.

The Province subsequently sponsored a study on optimum and interim routes outside Metro Toronto, released in April 1991 as *The Waterfront Trail: First Steps from Concept to Reality* (Reid et al. 1991). This report confirmed the feasibility of a trail alignment, and noted that a Waterfront Trail will link together some 34 major parks, 74 small waterfront parks and promenades, 40 significant natural habitats, and 25 marinas. It gave further support to the idea of the waterfront as a greenway, recommending that eight new

"green nodes" be acquired, and that links incorporate a corridor of greenspace.

In June 1991, a new public group, Citizens for a Lakeshore Greenway (CFLAG), was formed to support the concept of a waterfront trail. Clearly, its members also envision the links along the waterfront as "more than a four-foot strip of asphalt".

This evolution in emphasis, from recreational trail to greenway, prompted the Commission to examine more closely the concept of greenways, and how they might fit within the sphere of ecosystem planning. What we discovered was a planning approach that is rapidly gaining favour across North America and has considerable potential for application within the bioregion and across Ontario.

The term "greenway" is relatively new, although the ideas it embodies have been around for some time. The first modern use, in the 1960s, is credited to planner and author William H. Whyte. It combines the syllable "green" from the British term greenbelt, and "way" from the American term parkway. Appropriately, greenways themselves also connect the ideas behind the British and American words and the result is a system of protected linear corridors of open space, managed for conservation and recreation purposes.

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This emphasis on links contrasts with the traditional approach to conservation of open space and natural areas, which stresses purchasing blocks of parkland, large and small, often isolated in a sea of surrounding development. While such parks are vital for conserving habitat and for recreation, their value could be greatly enhanced by creating green links among them. In fact, the existing parks and natural areas in the Greater Toronto bioregion are the basic building blocks of a greenway system. These parcels, often termed "greenlands", include wetlands and woodlots, Environmentally Sensitive Areas, and Areas of Natural and Scientific Interest (ANSIs).

While it is important to define these and other aspects of a greenway, it is just as important to recognize how greenways differ from the more limited concept of trail systems, with which they are often confused. A trail right-of-way may be little wider than a sidewalk, but a greenway is a continuous corridor of natural vegetation and open spaces. Greenways may vary dramatically from each other in width, depending on landscape opportunities and on the character of the natural landscape, but those ecological elements are always present. A trail is usually — but not always — part of a greenway. In areas of ecological sensitivity, or on private lands within a greenway, a continuous trail may not be possible.

Most greenways created recently are those in and near American cities, but Ontario has several good examples of

> **The common greenway feature is linearity — they are all corridors of some type. They all go somewhere.**
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> Maryland Greenways Commission. 1990. *Maryland greenways . . . a naturally better idea.* Annapolis: Maryland Greenways Commission.

greenways. One of the best is along the Niagara Escarpment, a prominent landform feature that snakes across southern Ontario for 725 kilometres (450 miles) from Niagara Falls to the Bruce Peninsula. Under the Niagara Escarpment Planning and Development Act, a special Commission is charged with the responsibility of "maintaining the Escarpment and land in its vicinity substantially as a continuous natural environment".

This Niagara Escarpment Commission (NEC) administers an environmentally based plan, which limits development of private lands to that consistent with protection of the ecological, recreational, and visual qualities of the escarpment. A system of more than 100 public parks is complemented by the links of the Bruce Trail, which was created by a private association. More than 1.3 million visitors use the Bruce Trail annually, including 50,000 who stay overnight. As the lands adjacent to this escarpment corridor become increasingly developed, the value of its network of greenways and associated open spaces grows.

A second Ontario greenway is the result of work in and near Ottawa, carried out by the National Capital Commission (NCC), which has been involved for several decades in creating greenbelts and linked bicycle and pedestrian trails. The trail system includes loop routes along the Ottawa Greenbelt, in Gatineau Park, and along four major water courses. Currently 130 kilometres (81 miles) in length, the system has a variety of surfaces, and is heavily used in all seasons. Development of the NCC system has involved strong central planning and considerable public expenditure; the result contributes greatly to the high quality of life in the Ottawa-Hull region.

There are more than 500 greenways in the United States, many of them small-scale. However, the Bay and Ridge trails around the City of San Francisco are substantial twin greenways, each about 640 kilometres (398 miles) long. The Bay Trail greenway is being created by the Association of Bay Governments, with funding from a variety of public and private sources. Planning and implementation of the Ridge Trail is carried out by a special council, including citizens' groups, municipalities, and various agencies. Municipalities along the trail provide funding for their trail sections, assisted by private grants and donations.

A similar public-private partnership is at work in Oregon to sponsor creation of the Willamette River Greenway, which runs through nine counties and 19 municipalities. Under a State Greenway Law, municipalities are required to adopt plans and ordinances to protect greenway lands, and to take responsibility for managing greenway lands within their jurisdiction.

Some municipalities have established greenway advisory committees, made up of local citizens, to provide planning advice and seek input from other citizens and special-interest groups.

One clear lesson from the American experience: their greenways' success does not flow from massive public expenditures, but rather from a clear vision of the opportunities they offer, and from strong individual

and public commitment to that vision. Creating a greenway can foster a strong sense of pride and accomplishment within a community, and help local people focus more clearly on the kind of place they want to leave to their children.

THE BENEFITS OF GREENWAYS

If in some ways greenways are old ideas dressed up in new clothing, in other ways they represent the forefront of ecological and economic thinking. Implicit in the concept is the recognition of an overlapping matrix of benefits and values. Few greenways, taken individually, will bring all of the benefits described in this chapter. But, as an interconnected system looked at from a regional perspective, in the same way that a network of roads might be evaluated, the benefits of greenways are striking. In a landscape rapidly filling with humankind's infrastructure, greenways provide the natural infrastructure vital to an environmentally sustainable region.

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GREENWAYS ARE ECOLOGICAL CONNECTORS

Diversity is one of the fundamental underpinnings of natural systems, providing the abundance of different plants and animals that make them function. The importance of diversity has been recognized, among other places, in the proposed *Wild Life Strategy for Ontario* (Ontario Wild Life Working Group 1991), which ranks the conservation of biodiversity as a primary goal. As well as protecting the integrity of the ecosystem, a diverse mix of species enhances the potential for human interaction with wildlife and other elements of the natural landscape.

As agriculture and urbanization increasingly fragment natural habitats, the diversity of wild species declines sharply. In effect, the remaining bits and pieces become islands of habitat, isolated in a sea of farmland and suburbs. A major factor in the declining diversity within them is that they are unconnected to other green areas.

In even a completely natural setting, stresses — natural fluctuations in weather and food supplies, for example — can temporarily reduce or wipe out some species. Added to these natural fluctuations are the urban pressures of pollution, disturbance, and predation by cats and dogs. The small size of many habitat remnants makes them especially vulnerable to these stresses, and means that some species (e.g., those that require interior forest conditions) cannot be sustained. Severing habitat connections can be lethal for species that use different parts of the environment at various life stages, such as salamanders that breed in ponds but live mostly in forests.

Many species have an innate ability to disperse to escape the effects of these fluctuations or to recolonize once habitat conditions improve. In an urban setting, however, that natural dispersal process is often deadly, the results visible as road kills on almost any highway. Recolonization of isolated islands of habitat, especially by animals, is almost