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Photo: Chicago's Lurie Garden, by Pam Kaput

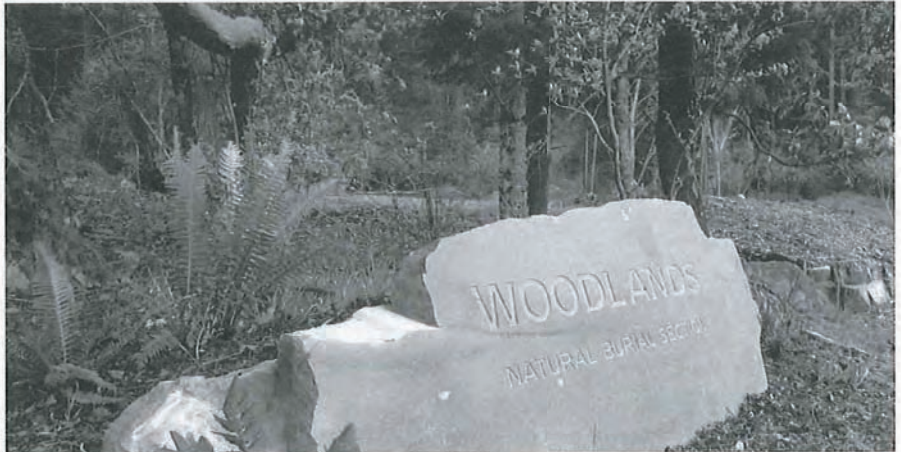
GREEN BURIAL

Gaining Ground in Canada

Few subjects elicit as much sense of intrigue as green burial. Almost everyone has heard of it, but few people can state with confidence what it really is. Like many environmental initiatives, the concept of green burial has evolved to mean many things – and take many forms. The level of greenness also varies, as does the motivation of those who promote green burial, and those who seek green burial for their own final disposition.

Green burial (also known as “natural burial,” “woodland burial,” “conservation burial,” and “country burial”) is based on the objective of minimizing the impact of human burial on the environment. In practice, this means that people are buried according to the following principles:

- ▶ the body is not embalmed (chemically-treated to delay decomposition);
- ▶ the deceased is placed in a fully biodegradable container (a casket or shroud made of natural materials);
- ▶ burial does not include an outer container (such as a grave liner, box, vault or crypt);
- ▶ the gravesite is allowed to re-vegetate to some level of what appears to be a natural state; and
- ▶ individual grave markers are either not used or are very discreet, in keeping with the intent to minimize the effect of the burial on the environment.



Green burial – such as that offered in The Woodlands at Royal Oak Burial Park on Vancouver Island – is just one more option for families to choose from when they make their final disposition arrangements.

Green Burial Movement

Today’s green burial movement began in Europe in the 1990s. It arose from the same beliefs as natural childbirth: that modern society had institutionalized the key events in life, leaving people feeling spiritually and culturally disconnected from what was most important in life – the meaningful experience of birth and death. Pioneers in the green burial movement believed that experiences surrounding a death should be restored to all those affected by re-integrating and re-engaging the community with burial practices. This required a simplification of practices and rituals, and the active inclusion of not just the individual, but also his or her family and friends in the planning and the interment process. Likewise,

the burial itself was to be done in a way that would facilitate, rather than forestall, decomposition.

While all of this could be interpreted as simply a return to the type of burial practised by humanity for millennia (and still practised by some religious groups), what separates contemporary green burial from ancient, traditional practices is the underlying, conscious desire to minimize the energy invested in the interment process, and to maintain or even improve the environment by making each burial as environmentally sustainable as possible.

At one end of the spectrum of green burial is the organized effort of groups committed to establishing conservation easements on ecologically-significant sites through burials. Rights of interment sold to families generate the revenue needed to protect sites in perpetuity. The intent is to restore the ecosystem after every burial so that, ultimately, there will be no trace of any grave. At the other end of the spectrum is a designated green burial area within an established cemetery,



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where it is understood that there will be some degree of maintenance, monumentation, and permanent access into the site. It is this model that is relevant to most municipal cemeteries in Canada today and will therefore be the model explored in the following case study of The Woodlands Green Burial Area at Royal Oak Burial Park in British Columbia. With the opening of this area in October 2008, Royal Oak became the first public cemetery in Canada to offer green burial as an interment option.

Royal Oak Burial Park: A Case Study

Royal Oak Burial Park is a scenic, 84 year-old cemetery on the Saanich peninsula of Vancouver Island that is operated jointly by the City of Victoria and the District of Saanich. Executive Director Stephen Olson fielded calls from people seeking a green burial site for years before seriously considering whether or not to pursue this opportunity. Research into the subject revealed that, by 2005, the percentage of green burials in the United Kingdom had risen to over 10 percent of total dispositions. At the same time, the cremation rate in Southern Vancouver Island reached 85 percent, one of the highest in North America. Although no link between these statistics seemed apparent, industry studies consistently tied the rise

in the cremation rate over the past few decades to a perception that cremation is "more environmental" than traditional casket burial. The demand for cremation and the demand for green burial arose from a common concern: to minimize the environmental footprint of disposition and interment.

The decision to move ahead on a green burial area at Royal Oak was also based on the availability of a secluded, one-third acre site in the northwest area of the cemetery, which had been used for the deposition of grave excavation material. Bounded on two sides by mature, second-growth Douglas fir forest, the site seemed to offer an ideal context for the venture. A plan and a development strategy were developed in close collaboration with cemetery designers. Using a standard 1.2 x 2.75 metre casket lot, a final capacity of 255 lots was achieved. Respectable by industry standards, and comparable to the rest of the cemetery, this yield was reached through careful planning, including the proposed reclamation of the site's gravel access roads for additional grave space in the final phase. By allowing the interment of either one body or the cremated remains of three people in each lot, The Woodlands was designed to accommodate up to a total of 765 interments.

The Woodlands was developed with minimal infrastructure, including limited subsurface drainage; no irrigation, sod, or ornamental plantings; and no concrete headstone foundations. Subsurface, standard metal marker blocks, located every 10 graves, ensure that lots can be easily located. In addition, a GIS/GPS value is assigned to every lot. The use of a special shoring "box" during grave excavation eliminates the potential for intrusion into existing, adjacent graves. Because lots are used according to a carefully managed, sequential, at-need selection process, issues related to potential ground movement and body "migration" that can arise when going back to adjacent sites for second interments, are essentially eliminated. Although no individual markers are permitted, five communal markers consisting of sliced, local basalt columns carefully placed around the site are available for simple memorial inscriptions.

Since opening three years ago, the burial park has performed nearly 60 "body" burials – an average of two to three per month. To date, the oldest person interred at The Woodlands was 91 and the youngest was seven. Seven of the burials were shroud-only interments, and five families took advantage of the option to fill in the grave completely by hand. A number of cremated-remains scatterings and biodegradable in-ground ash interments have also taken place. In addition, the burial park has now sold approximately 65 pre-need lots in The Woodlands for future use.

It is important to note that the traditional burial rate at the cemetery has not been affected by the availability of the green burial option. Since The Woodlands opened, the burial park is now completing more total burials every month. Ultimately, green burial is just one more option for families to choose from when they make their final disposition arrangements.

Case for Providing for Green Burial at Municipal Cemeteries

Environmental awareness continues to grow in Canada and municipal governments are increasingly embracing sustainable initiatives in all facets of their operations.

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Cemeteries are established on the principle of perpetuity, so the cost associated with establishing, operating, and ultimately maintaining a municipal cemetery, both in labour and resources, is potentially enormous. For municipalities with cemeteries, this is an important consideration.

From a land-use perspective, providing for green burial can be equally efficient to conventional burial, with the added benefit of creating new, naturalized green space in the long term. Operationally, the costs associated with green burial are comparable to or less than those of traditional burial. Maintenance is significantly reduced due to little or no mowing. Hand watering and other interventions are provided on an as-needed basis only. Based on the experience of Royal Oak, a green burial grave can be marketed at prices comparable to a basic casket lot. With optional cremation interments, additional revenue can be also be generated over time.

It may not be possible to create a green burial area at all existing cemeteries; however, where possible, selecting an edge location or an undeveloped section of the site is preferable to allow operations and management without visually impacting the traditional areas. The reclamation of degraded areas and the introduction of green burial into buffer zones are other possible opportunities. Creativity and flexibility are prerequisites for the design of green burial areas, to create unique, contextual sites that will appeal to the local community.

Choosing a means and a place of disposition is a profound, personal choice that eventually faces every individual and family. Since green burial is still a relatively new idea in North America and represents a very distinct type of disposition, it currently appeals to only a small segment of the population. Yet, providing for green burial in the municipal cemetery makes a statement about meeting the needs of the community, including those who themselves wish to make a statement about their values through their choice of final disposition. *MW*