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# SITELINES

Bimonthly Publication of The British Columbia Society of Landscape Architects



## President's Message

**Phytophthora ramorum • Spring CE • Annual Conference**

April 2005

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The purpose of Sitelines is to provide an open forum for the exchange of ideas and information pertaining to the profession of Landscape Architecture. Individual opinions expressed are those of the writers and not necessarily of those of the BCSLA.

# A Message from the President

BY MARK VAUGHAN MBCSLA

It is my pleasure to welcome you to the expanded edition of Sitelines that features additional content and even more colour pages. Our volunteer Co-Editors, **Cameron Murray** and **Laura-Jean Kelly**, continue to work hard to improve the quality of our bi-monthly newsletter. I encourage everyone to submit an article, news of your projects or your thoughts on the profession.



Mark Vaughan, Drawing by C Murray

I am pleased to announce that Patrick Harrison from JPH Consultants in Nanaimo has agreed to succeed **Adrienne Brown** as BCSLA Registrar. We look forward to working with Pat. Many thanks to Adrienne who has been on the Board of Directors since 1996. Her dedication and commitment to the BCSLA benefits the Society, the profession and you.

In this edition you will find news on the Continuing Education (CE) program. At the 2005 AGM the membership voted to make CE a core committee. The Committee successfully applied for funding from the **Real Estate Foundation of BC** to hold two workshops. Portions of the funds were used to present the Urban Forest Workshop in March. The workshop was a huge success and plans are underway to organize more workshops with a view to offering them around the province.



Canyonlands, photograph by Pawel Gradowski

Last Fall the Places Exhibition was part of an exhibit at the Surrey Art Gallery. The curator reported that the feedback was very positive and they had lineups. BC Recreation and Parks Association requested that the exhibition be erected again at their Annual Conference in February. If you know of a venue where you would like to see the boards featured please contact the provincial office. This is an excellent opportunity to raise the profile of the profession.

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# President's Message

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The 2005 BCSLA Annual Conference was well attended and there was lots of positive feedback on the venue, the program and even the food. We could not have held such a successful event without our volunteers and the generosity of the sponsors. Please continue to support the products and services supplied by our sponsors.

Volunteers are working hard on preliminary arrangements for the next BCSLA Conference, which will be held in Vancouver in June 2006. This conference will be held in conjunction with the Canadian Society of Landscape Architects Congress and the Council of Educators in Landscape Architecture. The Architectural Institute of BC and the Planning Institute of BC will hold their local and national conferences around the same time and there may be an opportunity for sharing of ideas between the professions.

Following the conference delegates will be invited to participate in the 2006 World Urban Forum. If you are interested in helping out call the provincial office now.

I am looking forward to serving you as BCSLA President and invite you to contact me if you have any comments, questions or concerns. The new Board of Directors will continue to develop and put in to action the work that was started by so many dedicated Members before them.



Arbutus, photograph by C Murray

## Biology of *Phytophthora ramorum*

BY SIVA SABARATNAM & LESLIE MACDONALD

**P**hytophthora ramorum (*P. ramorum*), the causal agent of 'Sudden Oak Death' (SOD), is a versatile pathogen which infects a wide range of plant species. Many of these species form the essential framework of the nursery and landscape industry. The common name 'Sudden Oak Death', penned to characterize the disease when it was initially observed on oak trees in California, has been changed to better reflect the symptoms and breadth of impacted species. It is now called "Ramorum Blight and Dieback".

Depending on the host plant, the pathogen can infect various plant tissues causing different disease symptoms. *P. ramorum* has been known to infect only the aerial plant tissues causing symptoms of blight on leaves, die-back on twigs and shoot tips, and bleeding cankers on tree trunk. However, on Rhododendron, zoospores were shown to enter the plant via lateral root initiations and wounds of the root system and spread to aerial parts systemically through xylem tissue.

*P. ramorum* infects over 59 species in 40 genera including *Abies*, *Acer*, *Arbutus*, *Camellia*, *Corylus*, *Pseudotsuga*, *Quercus*, *Rhododendron*, *Rosa*, *Rubus*, *Smilacina*, *Syringa*, *Taxus*, *Vaccinium*. It is relatively uncommon for one organism to infect

over the broad range from herbaceous plants to trees and shrubs. In some cases, only one species within the genus has been found infected, although the disease is still so new that the current list of susceptible species is by not means exhaustive. Some species are more susceptible to *P. ramorum* than others with symptoms ranging from leaf spots to death.

Taxonomically, all *Phytophthora* species are grouped under Oomycetes (not "true fungi") and are more closely related to algae than fungi—hence their propensity for moist conditions. An adaptable genus, *Phytophthora* is cosmopolitan and capable of living in both fresh and salt water as well as in terrestrial environments. *Phytophthora* species deserve our respect for their ability to wreak havoc, referenced in the translation of *Phytophthora* as 'Plant Destroyer'. It is the organism *Phytophthora infestans* that causes potato late blight and which contributed to the catastrophic Irish potato famine. Although *P. ramorum* is expected to share similar biology with other *Phytophthora* species, the biology or epidemiology of *P. ramorum* is not fully understood yet as the species was only identified in 2000.

*Continued on next page*



The nature of host plant and climatic conditions appear to have a great influence on the behavior of the pathogen. *P. ramorum* is capable of reproducing both sexually and asexually in the wild. However, sexual reproduction can only occur between two genetically distinct mating types. Gene sequencing studies reveal that, in North America, only one mating type (mating type 2) is known to exist in the wild (only in the USA), hence the possibility of emerging new and/or more aggressive strains of *P. ramorum* via sexual reproduction is unlikely. Laboratory mating experiments also indicate that, since the North American mating type and European mating type (mating type 1) have been geographically separated for many years and, thus, exhibit a high degree of genetic incompatibility, mating types 1 and 2 are incapable of producing viable progenies. On the other hand, *P. ramorum* reproduces asexually in the wild as well as under greenhouse or nursery conditions.

In planta, *P. ramorum* grows actively under wet/humid and moderate temperatures (15-18 oC) which also trigger the sporulation of the pathogen. Sporangia (a type of spore) are produced mainly on plant surfaces. Both sporangia and masses of biflagellated zoospores produced inside the sporangia are spread by water splashes and wind currents. Studies conducted in the US nurseries indicate that the pathogen propagules can spread up to a distance of 0.5-1.0 meter radius from an infected plant in a growing season. New infections are initiated by both sporangia and zoospores which, under wet and warm conditions, germinate on plant surfaces and penetrate and colonize the host tissues. Under cooler (and moist) conditions, *P. ramorum* can also thrive, although the growth of the pathogen is restricted. It can over-winter as mycelia, sporangia, or chlamydozoospores (a more resilient type of spore) on dormant plant tissues, and perhaps in the soil or organic matter. Surveys conducted in American nurseries and tan oak forests identified the presence of *P. ramorum* propagules in the soil, potting media and irrigation

water, and forest soils and streams. However, no direct evidence is available to support the initiation of new infections by these propagules.

In the coastal forests of California, *P. ramorum* causes a lethal disease on tan oak (*Lithocarpus densiflorus*), black oak (*Quercus kelloggii*), and coast live oak (*Quercus agrifolia*). It causes bleeding cankers on trunks and subsequent die-back of the tree. New infections are initiated by sporangia spread from the blighted leaves and twigs of the adjacent shrubs, especially bay laurel (*Umbellularia californica*) which is highly susceptible to *P. ramorum*. The propagules germinate and enter the trunk through natural openings and spread to inner vascular tissues via xylem rays. The pathogen colonizes the sugar-rich phloem, but marginally colonizes the bark. Following infection, a canker develops under the bark and sappy exudates (phloem sap) flow outside the bark. Subsequent girdling of the cambium tissue leads to the die-back and eventual death of the tree. Infected trunks attract beetles and insects. Subsequent beetle infection, chiefly by *Ambrosia* species can further weaken the *P. ramorum* infected trees. Studies are underway to investigate whether the beetles play a role in the *P. ramorum* spore dispersal and disease transmission.

There is still significantly more to learn with this new disease. Over 360 researchers from 11 countries attended the Sudden Oak Death (SOD) Science Symposium in Monterey, California on January 18-21, 2005. The symposium, organized by the University of California in Berkeley, United States Department of Agriculture (USDA) Forest Service and the United States Forest Department, was designed to bring together a broad spectrum of scientific community and officials from various institutions who have been working on *P. ramorum* to provide an overview on the

current knowledge of *P. ramorum* in forestry, woodland, urban forestry, nurseries, and other agricultural settings.

Enhanced awareness and co-operation by everyone with a connection to the plant world will be the key factors in addressing the threat from *P. ramorum*. Continued discussion and outreach, through articles such as this, are important to garner understanding and support for the full scope of individuals affected by this disease. Focusing our collective energies and considering the broad implications on the environment and economy must be the priority of everyone to make headway against this disease.

This is where the practical and effective approach of a certification program fits in well. Increased surveillance, testing, traceability, use of best management practices and auditing will provide growers and regulators with the tools to detect the pathogen early and subsequently manage it to reduce the risk of infected plants.

Further information can be found by visiting the following sites:

<http://www.inspection.gc.ca/english/plaveg/protect/pestrava/sodmsc/sodfacte.shtml>

<http://www.suddenoakdeath.org/>

[http://www.suddenoakdeath.org/pdf/OSU\\_Pramorum.pdf](http://www.suddenoakdeath.org/pdf/OSU_Pramorum.pdf)

*Authors Dr. Siva Sabaratnam, P.Ag. and Leslie MacDonald, P.Ag. are with the Plant Health Unit, Food Safety and Quality Branch, BC Ministry of Agriculture, Food & Fisheries, Abbotsford, BC.*



# Phytophthora ramorum, Garry Oak and British Columbia Forests

BY WAYNE ERICKSON

My storyline is easy but not necessarily enlightening. We simply don't know the true degree of threat that this forest disease (*Phytophthora ramorum*) poses for British Columbia. Potentially the impact is high; but fortunately Sudden Oak Death has not come to British Columbia forests. Garry oak (*Quercus garryana*), our native British Columbian oak species, is now recognized nationally as the foundation for a group of ecosystems both endangered themselves and serving as habitat for many other plants, animals, and invertebrates at-risk. A Garry Oak Ecosystem Recovery Team has been federally mandated to respond to these issues. I'm happy to report that Garry oak, along with others in the white oak subgenus, does not appear to be a host under field conditions in infested areas of California. However, *P. ramorum* can infect a diverse array of plant species, with varying degrees of symptom severity. *Arbutus* (*Arbutus menziesii*) has proved to be highly vulnerable. *Arbutus* is a co-dominant tree with Garry oak on many sites along the inner southwest coast of British Columbia.

Symptoms of Sudden Oak Death were first observed in natural habitats in California in 1994. Sudden Oak Death soon reached epidemic proportions, extending over 300 km of the central California coast, within 80 km of the shoreline. The cause of Sudden Oak Death remained unknown throughout the '90s, and the plant pathogen, a fungus-like water mold, was isolated, tested and named *Phytophthora ramorum* over the course of 2000 and 2001. It has now killed tens of thousands of native oaks and other tree species. By 2004, a total of 14 counties were involved. Almost all trees are affected in some stands and nearly all the woody understory is susceptible. A number of other

insects and fungi add their injury to trees already affected by this pathogen.

In 2001, a Sudden Oak Death infestation was discovered in a forest near Brookings in southwestern Oregon. Officials responded with a vigorous control program. As of 2004, approximately 24 ha on 18.5 square kilometers were still considered infected. Also in 2001, a Canadian pest risk assessment concluded that damage could be expected to susceptible flora should *Phytophthora ramorum* become established. A high potential impact was indicated due to the ecological importance of many known host plants, including understory species of natural forest stands.

British Columbia plants now known to be susceptible to Sudden Oak Death include Douglas-fir (*Pseudotsuga menziesii*), Sitka spruce (*Picea sitchensis*), western hemlock (*Tsuga heterophylla*), grand fir (*Abies grandis*), western yew (*Taxus brevifolia*), bigleaf maple (*Acer macrophyllum*), *arbutus* (*Arbutus menziesii*), cascara (*Rhamnus purshiana*), hazelnut (*Corylus cornuta*), salmonberry (*Rubus spectabilis*), baldhip rose (*Rosa gymnocarpa*), evergreen huckleberry (*Vaccinium ovatum*), red rhododendron (*Rhododendron macrophyllum*) (yellow listed), hairy honeysuckle (*Lonicera hispidula*), poison oak (*Toxicodendron diversiloba*) (blue listed), false solomon's seal (*Smilacina racemosa*), western starflower (*Trientalis latifolia*), and coastal wood fern (*Dryopteris arguta*) (blue listed). Many of these species are not killed by this pathogen, and only manifest leaf spots or twig blights (all of the conifers listed above, for example). However, some of these native species may be highly susceptible. For example, in one study 75%



Garry Oak, Drawing by Briony Penn

of *arbutus* seedlings died when inoculated with *Phytophthora ramorum*.

Other species in these genera could be vulnerable. Other plant genera with susceptible species include willow (*Salix*), *Viburnum*, manzanita and bearberry (*Arctostaphylos*), and bluebead (*Clintonia*). Our native species from these genera might also prove to be susceptible.

Impairment of ecosystem function and an increase in fire hazard have been identified as problems in areas affected by the pathogen. The loss of species diversity in unique habitats (such as the Garry oak ecosystems) is another possible outcome of concern in the risk assessments. Further, the loss of forest/ understory cover can lead to increased soil erosion, and exacerbates the de-stabilizing effects of predicted climate change and other species invasions. These are among many factors which may increase the impact of Sudden Oak Death. Researchers postulate that infections on the many host species may build up a reservoir of inoculum in forest stands, which in turn infects susceptible trees. British Columbia does have forests similar in structure and species composition to the affected California stands. The known host list for B.C. includes many important forest trees, understory plants, and species already of conservation concern due to other threats.

*Continued on page 8*



# Sudden Oak Death for Landscape Architects

BY PAWEL GRADOWSKI, MBCSLA

I am not an expert in plant pathology. I am a Landscape Architect faced with an unfolding situation in BC, where a significant number of healthy plants can be authoritatively removed from an existing landscape and promptly destroyed, only because they are potential hosts of a disease that our government is trying to stop from spreading. To explore the impact of this situation, I wish to share some thoughts regarding *Phytophthora ramorum*, commonly known as Sudden Oak Death. In this article I will concentrate on a few implications of this disease that may affect our professional activities. I will also present you with guidelines regarding this matter, hoping that within a few years, our professionalism and proactive thinking will

help control the spread of this problem and, most of all, protect our precious landscape.

The Canadian Food Inspection Agency recently implemented a strategy in BC that was designed to help control the spread of this disease. Whenever *Phytophthora ramorum* is found on a site, CFIA issues a letter to the owner requesting a complete removal and destruction of all infected plants, together with any other adjacent potential carriers of the disease or host plants. It is believed that this infection can spread with a splash of water and therefore CFIA requires the destruction not only of infected plants; but also all potentially infected host plants. Scientists have established a minimum distance between two host plants that



may prevent further spread of *Phytophthora ramorum*. Consequently, all infected and healthy host plants that are located within a minimum distance from either the positively identified plant or another potentially infected host have to go. In BC, this distance has been established as four metres; however, based on new research, this regulation for the safety buffer may change. I recommend checking the government website for any changes. By following this minimum distance regulation, one

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## Garry Oak

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Genetic resistance of host plants and climatic restrictions may provide possible mitigation. For example, California researchers are hopeful that the natural inland spread of the pathogen will be limited by the warmer, drier climates of the Sierra Nevada. The pathogen is easily spread by humans transporting contaminated soil or infected plant material, including nursery stock, and that is why quarantine laws have been established. Natural Resources Canada and the Canadian Forest Service are involved in the Canadian response to Sudden Oak Death, so check their website (below) for new information as it develops. Landscape Architects could become involved, in order to exchange professional information and support the efforts of the Garry Oak Ecosystem Recovery Team (see below) on Sudden Oak Death and other salient issues.

### Web links:

Pacific Forestry Centre, Canadian Forest Service:

[http://www.pfc.cfs.nrcan.gc.ca/news/suddenoak\\_e.html](http://www.pfc.cfs.nrcan.gc.ca/news/suddenoak_e.html)

California Oak Mortality Task Force

<http://nature.berkeley.edu/comtf/>

Canadian Food Inspection Agency

<http://www.inspection.gc.ca/english/plaveg/protect/pestrava/sodmsc/sodmsce.shtml>

Garry Oak Ecosystem Recovery Team

[www.goert.ca/](http://www.goert.ca/)

*About the author: Wayne Erickson is a Professional Agrologist and Wildlife Conservation Ecologist with B.C. Ministry of Forests. He did his M.Sc. thesis at UVIC on Garry Oak ecosystems. Wayne remains active on his topic and participates in the International Oak Society. He wishes to thank Eric Allen and Brenda Callen of the Pacific Forestry Centre for their input and Briony Penn for the use of her illustration.*

# Reducing the Risk of Buying Plants with *Phytophthora ramorum*

BY JANE STOCK, EXECUTIVE DIRECTOR, BC LANDSCAPE AND NURSERY ASSOCIATION, BCLNA

Incidents of *Phytophthora ramorum* in British Columbia in 2004 have caused landscape architects, municipalities, property managers, property developers and others to wonder what steps they should take to reduce risk of buying plants infected with the disease.

The first reality is that regardless of where plants are purchased from across North America or Europe, there is no method of guaranteeing that plants are free from this disease, short of carrying out DNA tests on every plant. The symptoms, such as brown spots, are so common in the plant world that testing is the only sufficiently reliable identification technique. For example the infected California camellias that were distributed across North America last year appeared to be perfectly healthy. There was nothing the grower did that was inappropriate in growing or selling the plants, and nothing to indicate to the purchasers that they should be concerned.

The second reality is that since this disease was only identified in the late 1990's, there is still much to be learned about it. For example, the host list of plant genera that have had one or more positive for *Phytophthora ramorum* is continually increasing. Buying plants from the non-host list is of relatively little value as a due diligence practice since the majority of plants currently listed on the non-host list have likely not been exposed to the disease. Other articles in this issue of *Sitelines* provide a more in-depth look at the *Phytophthora ramorum* science.

Understandably, some groups have decided to take strong actions that they feel will protect them from occurrences of purchasing plants with *Phytophthora ramorum*. Unfortunately, their actions do not provide the protection intended. For example, a nursery that has a positive is extensively

sampled by the Canadian Food Inspection Agency. Often, thousands of samples are taken and must all be found to be negative before CFIA will allow full shipping to resume. Furthermore, extensive destruction will have been done in the nursery block where the positive was found.

The good news is that *Phytophthora ramorum* is very rare in Canada, with only a few incidents in British Columbia. The following list shows the number of facilities in the US that had positive finds in 2004: Alabama (3), Arkansas (1), Arizona (1), California (55), Colorado (1), Connecticut (3), Florida (6), Georgia (16), Louisiana (5), Maryland (3), North Carolina (9), New Jersey (1), New Mexico (1), New York (1), Oklahoma (1), Oregon (24), Pennsylvania (1), South Carolina (4), Tennessee (2), Texas (11), Virginia (2), Washington (25). British Columbia, which has been tested far more extensively than any other Canadian location had 5, plus 9 from the Camellia recall. BC was the only North American jurisdiction to carry out a public recall.

More good news is that Canadian nursery growers have developed a *Phytophthora ramorum* Certification Program, with BC as the pilot project. The official documentation for this program proves to clients that the participating nursery has met the high standard of actions required to achieve certification. Currently, the documentation consists of a letter issued by the legal firm MacKenzie Fujisawa verifying that host and non-host materials on the nursery were inspected and sampled per the program protocol and that all results were negative for *Phytophthora ramorum*. The objective of the program is to control the possible spread of this disease and to protect domestic and export markets. It is based on the Canadian Food Inspection Agency (CFIA) and

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## Landscape Architects

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infected host plant (i.e. Rhododendron) can cause the removal and total destruction of thousands of healthy host plants only because the distance between them is less than allowed by the regulation. As you can imagine, this can create a potentially disastrous situation that may result in hundreds of thousands of dollars in damages. As for the emotional damage, just imagine the consequences of removing the entire collection of Rhododendrons from a place like the VanDusen Gardens.

CFIA has also introduced additional regulations in an effort to control the further spread of *Phytophthora ramorum*. There are restrictions on selecting replacement plant material within a regulated period of time, specific rules for disposing of removed plants and on soil sterilization within the cleared area. Also, host plants located in the neighbourhood, outside the minimum distance from the infected area, may be

placed under quarantine, meaning that relocating these plants may not be permitted until further testing confirms that they are not infected.

Landscape Architects cannot stop the disease from spreading in Nature; but we have some control of the design process and installation procedures for a new landscape treatment. This allows us to reduce the potential impact of this disease. Also, by introducing some minor changes into an existing landscape, we can attempt to protect an established site from possible destruction. If we look at the constantly growing list of host plants, we will understand that eliminating these plant species from our landscape is out of the question. However, we can implement a number of initiatives that can reduce the impact of *Phytophthora ramorum* on our everyday practice. Being proactive in this matter can help control the spread of this disease and may protect our clients from the significant financial and emotional burden of replacing large sections of an established, attractive landscape.

Here is what we can do:

1. Educate ourselves about issues related to the *Phytophthora ramorum* disease and keep up to date.
2. When designing a large plant grouping, divide sections of host plants with known non-host plants, creating a series of 'firewall' buffers. As just one infected plant can cause the removal of an entire block of host plants; the smaller the block, the less potential damage.
3. When dealing with an existing landscape composed predominantly of host plants; relocate some host plants and introduce a series of non-host plant partitions. This approach may protect some plants from future infection.
4. When creating non-host buffers, consider that the list of host plants is continually updated with new species and that some plants may change their status. Therefore, it is wise to use various genres of non-host plants for these buffers.
5. Revise your planting specifications, requesting that only nurseries that are certified, according to CFIA or BCLNA regulations, can supply plant material to your site.
6. In very special circumstances, when buying specimen plant material from a unique source (i.e. somebody's backyard), request a test of the plant material prior to delivery to the site.
7. Educate your clients about the potentially negative effect of the *Phytophthora ramorum* and let them know what precautions you are taking.

Landscape Architects cannot predict all potential problems that our designs may face in the future. However, as professionals, we should do whatever we can to protect our clients and most of all to be good Stewards of the land.

## MOSQUITOS AND THE SPREAD OF WEST NILE VIRUS

The DVD presentation of the 2004 seminar by Dr. Michael Jackson

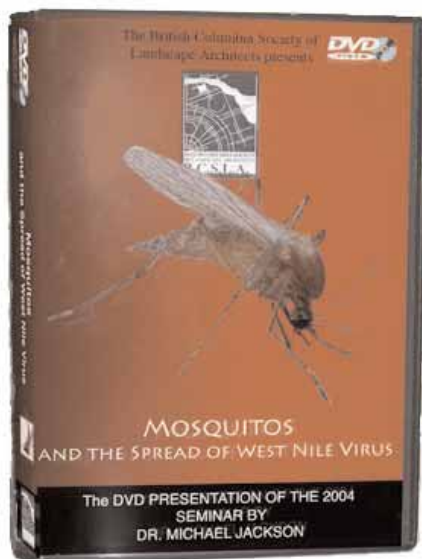
### IS NOW AVAILABLE ON DVD

As part of its continuing education program the British Columbia Society of Landscape Architects has released this DVD as part of a long-term public health initiative.

The DVD is targeted towards Public and Private Sector Landscape Architects, Planners and Engineers. As well, the information included in this DVD contains much of interest to anyone who would like to know more about this subject.

The price for the DVD is \$45.00 plus shipping. \$40.00 for BCSLA members.

Please contact [admin@bcsla.org](mailto:admin@bcsla.org) to purchase a copy or visit [www.bcsla.org](http://www.bcsla.org) for more information.





# Reducing the Risk of Phytophthora ramorum

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United States Department of Agriculture (USDA) standards and is equivalent to the programs in Washington, Oregon and California.

Participation in the Program is completely voluntary as BC, based on its low number of positive finds at facilities, remains unregulated by either Canada or the USA. (Washington, Oregon and California are regulated.) To date, nearly 300 BC nursery, floriculture, forest seedling and Christmas tree growers have registered in the program. Go to [www.CanadaNursery.com](http://www.CanadaNursery.com) and click on the P. ramorum Certification button to see the list of nurseries that have met their sampling and testing certification standards.

Phytophthora ramorum Certification program components include:

**Sampling and testing:** A minimum 40 samples of host plants are taken – more if there are suspicious symptoms. Visual inspection of non-host plants with samples taken if there are suspicious symptoms.

**Participation in a mandatory workshop:** Growers learn about a wide variety of best management practices such as isolation blocks for incoming non-certified materials, regular documented visual inspections of their stock and biosecurity measures for vehicles and people entering the property. About 200 companies have completed this process from January 2005 to date with more registered.

**Implementation of Best Management Practices:** underway

Pass an annual 3rd party audit to ensure implementation of BMPs and that bio-security measures meet the specified standards. The audit process will be managed by the Canadian Nursery Certification Institute, an independent organization that will itself be audited by the Canadian Food Inspection Agency to ensure it maintains appropriate high standards.

In conclusion, clients as well as nursery growers, retailers and the landscape trades will all be learning about Phytophthora ramorum over the next four or five years. Experience will help us understand whether the disease is truly a threat to British Columbia's landscape or forests, or whether it is yet another of the approximately 30 Phytophthoras in B.C. that have to be managed. Hopefully a diagnostic test will be invented to enable reliable field tests for the disease and research is underway. In the meantime, it is best if all of us make informed, not reactive, decisions regarding appropriate due diligence for Phytophthora ramorum. The best and easiest due diligence is to buy only from nurseries that are participating in the P. ramorum Certification program.

*If you have questions not addressed in this article, please go to [www.CanadaNursery.com](http://www.CanadaNursery.com) or call Hedy Dyck or Jane Stock at 604-574-7772 / 1-800-421-7963.*



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# The Mixed Joy of Spring

BY KATREEN GRADOWSKA

*"We want to eradicate the problem not the industry."*

*This is a remark quoted from the Oregon Nursery Association newsletter that I came across several months ago. It did not feel relevant at that time; but it perfectly conveys our circumstances right now.*

The horticultural industry in British Columbia is diversified and mutually supporting. It is also one of a few agricultural industries that do not rely on government subsidies for regular operations. Our product is a living organism that requires care and time. Before a seedling becomes a tree in the landscape, many people will touch it or talk about it. If I reflect for a moment, maybe fifty people will come in direct contact with that plant before it reaches its final destination, not to mention those that will stand in its shade on a hot day in the city.

It is of great importance to implement the best possible measures to control and eradicate *Phytophthora ramorum*; but it is equally important to acknowledge and sustain the balanced structure of the industry from seed collectors to growers, retail stores, landscape contractors, designers and landscape architects; as well as countless companies providing services and materials, municipal employees and home gardeners.

Even though I work in a nursery, where the consequences of a positive find are a real threat to the livelihood of over seventy people; I try my best to maintain an objective perspective on the issue of *Phytophthora ramorum*. First comes the infamous name: Sudden Oak Death. It may not be so Sudden, as described in an article by Pavel Svihra: *"Not So Fast"*, (*American Nurseryman*, May 1, 2004). Our efforts of eradication include, apart from oaks, forty other genuses which translates into thousands of species and cultivars. And then comes the word Death. Just think what would happen if this particular noun were incorporated into the names SARS or Avian Flu. For this reason the name has been officially changed to *Phytophthora ramorum*; but S.O.D. has not been forgotten, much to the outrage of the sod and turf industry.

My point is not to make it sound funny but rather to encourage the involved parties to think and act in a broad way. It is essential to educate the public about *Phytophthora ramorum*. There is a need for the Canadian Food Inspection Agency (CFIA) to work on public communication, as well as for Agriculture Canada to support the industry in cases of losses related to the *Phytophthora ramorum* destruction protocol.

Everybody in the nursery business looks towards spring testing with a great deal of apprehension. A nursery that receives notice of a 'positive find' may not survive one season. The value of the destroyed plants, the cost of removal and deep burial is followed by the cost of replacing plants, lost business and, most of all, a damaged reputation and strained business relations. Profit margins are too small to accommodate these losses.

On the other hand nurseries are determined to survive. We will get certified, extend our sanitary practices to dipping, spraying and more. If nurseries in Oregon can do this, we certainly can too. Everybody will have to accommodate the new reality of biosecurity measures. Virkon, a disinfecting agent, is kinder to shoes than bleach. But leave your dress shoes at home if you are going to visit a nursery this season.

*Phytophthora ramorum* testing in the spring and summer of 2005 will verify the extent of the infestation and validate future developments. Actions will be taken and plants will be destroyed. *Phytophthora ramorum* is one more pest we will have to deal with together with the pine beetle, ash borer and others. We highly value oaks and coastal arbutus. It would be great loss to the landscape should they be affected. I hope this will never happen. On the other hand, I cannot help but see our actions in a broad, continental perspective. As we lose more of the natural landscape to agriculture and urbanization, we are at once protectors and destroyers of Nature.

*Author Katreen Gradowska is engaged in research and development with Piroche Plants.*

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# Continuing On with Continuing Education

BY BARRY POTVIN, MBCSLA

Congratulations everyone, 2004 was the first year for the BCSLA Mandatory Continuing Education program. While we knew that, along with the implementation of a new program there would be a few growing pains to experience; we were pleasantly surprised by the membership's response to the program. The wide variety of work activities, courses, conferences, books, lectures, tours, vacations and activities in which you have participated throughout the year and which have gained you Credits is amazing!

In case you may be one of the few who have not as yet printed off your CE form and sent it to Tara at the BCSLA office or completed it online; here is a quick summary of the program which has been designed so that you may easily achieve your CE goals.

## THE PROGRAM at a GLANCE

Between January 2004 and December 2006, members and interns are required to collect 30 Credits. There is no minimum number of credits required per year; but it is always best to be proactive and collect at least a few credits each year. To assist you in completing your monitoring form, please refer to your Policy and Program Guide. For example, here are two scenarios which would garner eleven CE points.

### SCENARIO A

Work full time for 12 months  
– 6 Credits

Attend the BCSLA Conference and AGM –  
5 Credits

### SCENARIO B

Work half time throughout the year  
– 3 Credits

Volunteer as a Committee Chair  
– 4 Credits

Contributing Author or Editor  
– 2 Credits

Attend 3 Landscape Architecture related lectures (6 hrs total) – 2 Credits

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At a recently completed random audit of CE Reporting Forms, we recorded the following examples of items which were claimed for credits:

1. The Land Summit
2. MMCD Specification Workshop
3. West Nile Virus DVD
4. Thesis Advisor UBC – LARC Masters Program
5. Girl Guide Leader
6. Real Estate Investment Seminar
7. Light Resources Lecture Series
8. Volunteer Master Gardener – Van Dusen Gardens
9. BCRPS Spring Training Sessions
10. North Shore Credit Union Mountain Biking Conference
11. West Vancouver Community Services Advisory Committee
12. GIS Training Course
13. CSLA Annual Conference
14. Garden Design Judge
15. Nightly Reading – LA and Design Related
16. Communities in Bloom Committee
17. Society for Ecological Restoration Conference
18. LARE Exams
19. Making Meetings Work Course
20. B.C Chamber Network Lunch and Seminar

The reporting forms that you submitted will assist the CE Committee in adding to the opportunities list. If you become aware of new opportunities, please help to get the word out to other members, by letting Tara at the BCSLA office know all the details.

56% Reported an Average of 10.25 Credits

In 2004, of the 307 members and interns who were required to participate in the mandatory program, 56% reported an average of 10.25 Credits. This is right on track for 30 credits in three years! For some of our members and interns it may seem easy; but that is not always the case for everyone. Finding the right CE opportunity in your location, at the right time and for the right price can be a challenge. The CE Committee does realize this and we are doing our best to address your concerns.

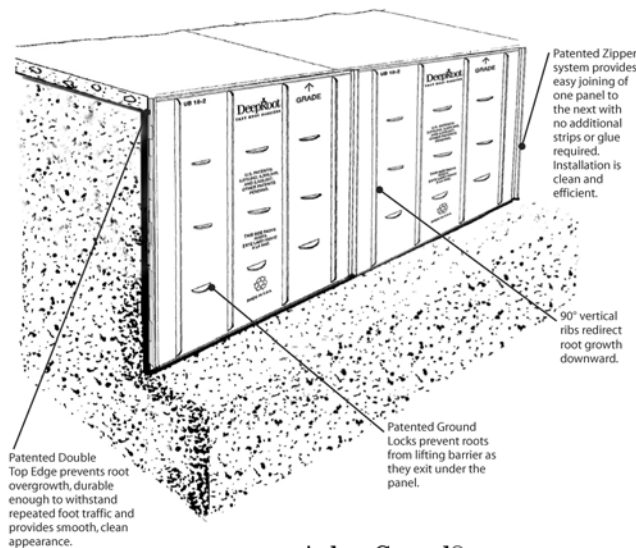
That being said, we ask you to please be proactive in determining the number of credits that you have earned by taking the time to: A/ read the CE Policy and Program Guide, B/ review the BCSLA Friday File and take note of CE opportunities in your area, and C/ make enquiries with other professionals in your chosen or allied profession as to what they are doing for Continuing Education. Please let the BCSLA CE Committee know of upcoming opportunities in your area so that we may communicate this information to all of our members. All in all, the program is off to a great start and, in spite of a few glitches, we feel confident that it will continue to evolve into a

program that meets the needs of the BCSLA membership. Feedback is always welcome!

The Committee would like to thank the many members and interns who have participated in the CE program to date and would encourage you to contact Tara at the BCSLA administration office (admin@bcsla.org) or a member of the CE Committee with any enquiries you might have in order that we can endeavour to fine tune the BCSLA Continuing Education Program. We are looking forward to 2005 and more opportunities for us all to continue and expand our continuing professional education in a variety of stimulating and interesting ways!

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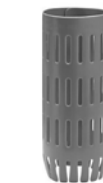
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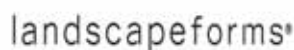
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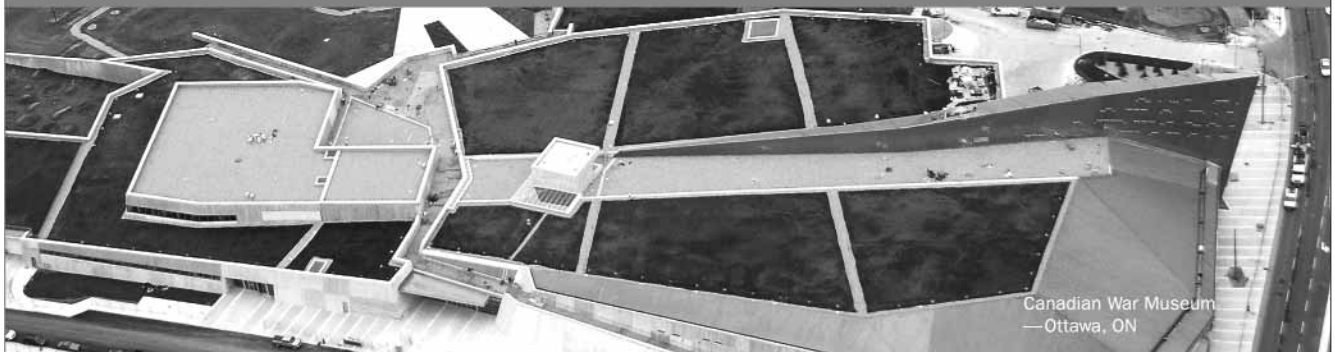
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# BCSLA Calendar of Events

April 6	July C/LARE Registration Begins
April 19-22	PIBC 2005 Annual Conference
April 26	BCSLA Board of Directors Meeting with CSLA Fellows
May 5	BCSLA Board of Examiners Spring Sitting
May 24	BCSLA Board of Directors Meeting
June 13-14	Landscape Architectural Registration Exams, Vancouver, BC
June 26-29	42nd IFLA World Congress, Edinburgh, Scotland
June 28	BCSLA Board of Directors Meeting
July 25	C/LARE Sitting Sections A and B
July 26	C/LARE Sitting Section D
July 26	BCSLA Board of Directors Meeting
July 30	BCSLA Membership Application Deadline
August	BCSLA Credentials Committee Meeting
August	C/LARE (Computerized Landscape Architectural Exams)
August 15-16	CSLA Board of Governors Meeting Winnipeg, MB
August 17-20	CSLA Congress – Exposed!, Winnipeg, MB
August 23	BCSLA Board of Directors Meeting
Sept. 8-10	CLARB Annual General Meeting, Los Angeles, CA
Sept. 13-14	BCLNA CanWest Hort Show, Vancouver, BC
September 23	BCSLA Board of Directors Meeting
Sept. 25-28	The Value of Trees: Pacific Northwest Chapter ISA Annual Conference, Victoria, BC
October 3	C/LARE Sitting Sections A and B
October 3	C/LARE Sitting Section D
October 7	Landscape Architectural Registration Exams (LARE) Candidate Order Deadline: December 2005 Sitting
October 7-11	ASLA Annual Meeting & Expo, Ft. Lauderdale, FL
October 25	BCSLA Board of Directors Meeting (date tentative)
October 28	BCSLA Board of Examiners Fall Sitting
October 31	2006 Sitelines Annual Update Submissions
November	BC Landscape and Nursery Association AGM (date tentative)
November 8	World Town Planning Day
November 22	BCSLA Board of Directors Meeting
December	Landscape Architectural Registration Exams, Vancouver, BC
December	BCSLA Festive Season Party
December 20	BCSLA Board of Directors Meeting
December 31	BCSLA 2006 Membership Dues Payable
December 31	BCSLA Continuing Education Form Submission Deadline

**Watch for details  
on the World Urban  
Forum and CSLA  
Congress in June 2006  
in Vancouver, BC**



Tom Llewellyn presents Linda Nielsen with the President's Award, photograph by Pawel Gradowski



Kathy Dunster reviews UBC Student Posters at the The 2005 BCSLA Annual Conference, photography by Sung Ae Sim

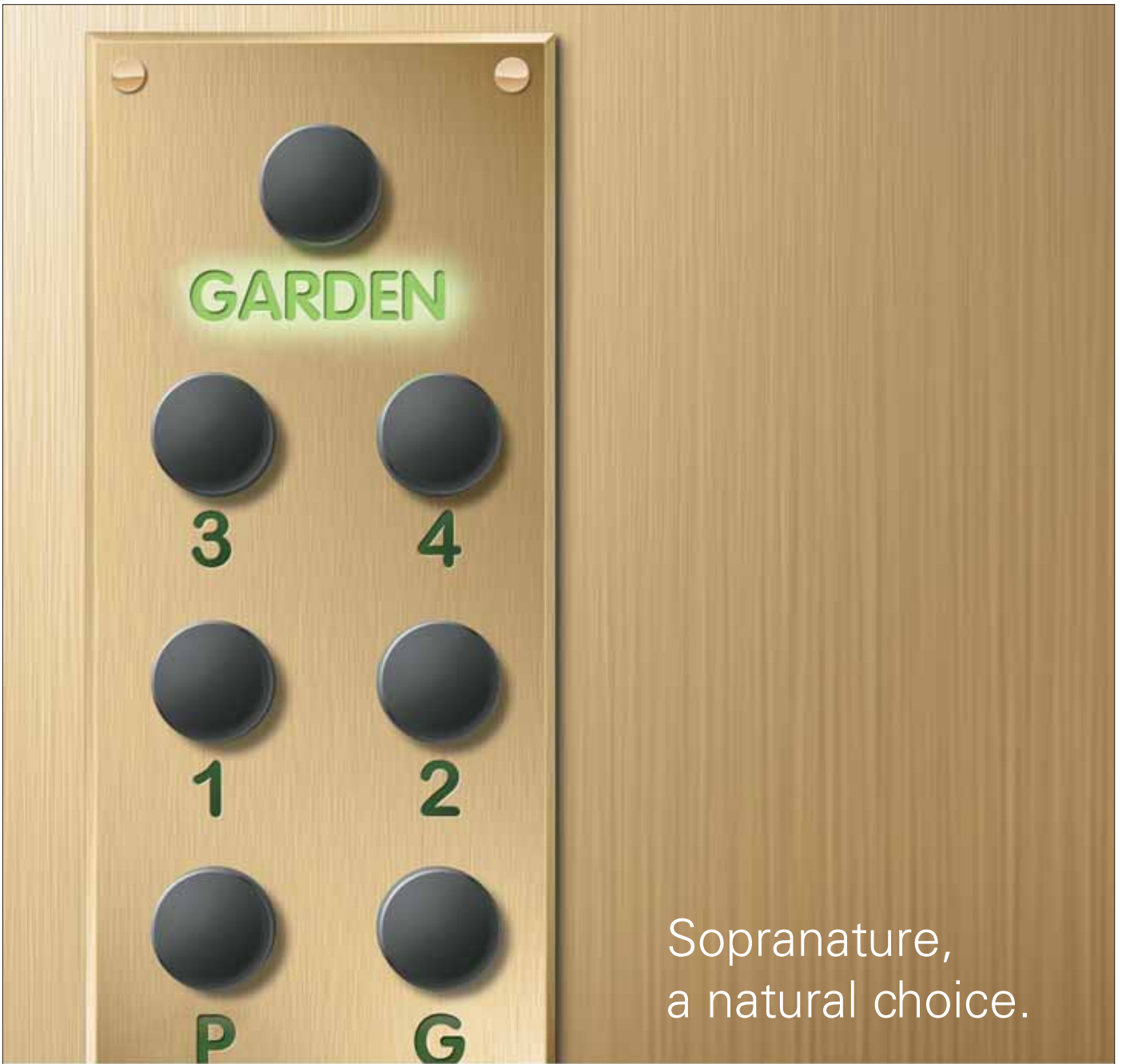


The 2005 BCSLA Annual Conference was well attended, photograph by Sung Ae Sim



Larry Diamond moderated a Conference panel on professional practice, photograph by Sung Ae Sim





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