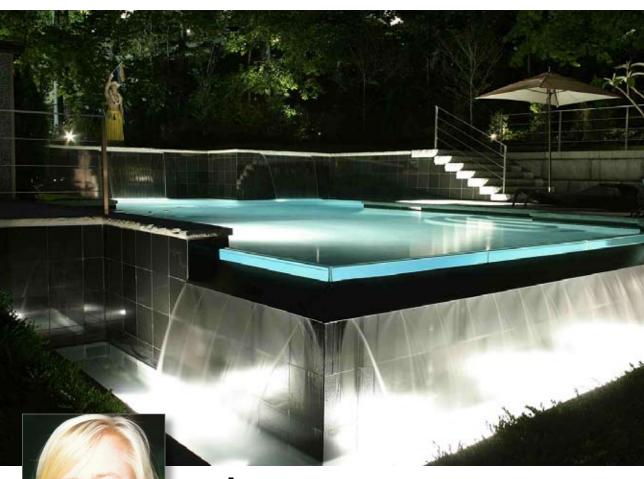
LANDSCAPE **DESIGN**



COMMODITY GROUP NEWSLETTER



welcome message from the chair

I am finally in style; my cheap Scottish upbringing is in vogue. My frugal ways of tearing up discarded paper into quarters for telephone messages and relegating my gas-guzzling truck for deliveries only is now environmentally responsible. It is the headline in every newspaper worldwide. We are now environmentally critical of every facet of our day-to-day life, but have we translated this to our work as landscape designers? Can we be doing more?

In this issue, we explore some new and exciting technologies that encourage responsible environmental practices. I encourage us all to take a moment, or two, and start to think about how we can take a real leadership role as stewards of the environment. After all, we are the original green communicators to the public. Hopefully, this issue will stimulate thoughts on how you can do your part for the environment and promote it to your clients.

Beth

LANDSCAPE **DESIGN**

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Green roofs, the new frontier in horticulture

By Kees Govers, Caradoc Green Roofs Ltd.

It is not every day that a new exiting field in horticulture opens up. But that is exactly what has been happening in the last few years with green roofs. The push for green, energy efficient, LEED certified buildings within the architectural community has focused a lot of attention on the performance of the building envelope. And one of the most visible, and historically most neglected, is the roof of a building. Green building is changing all that. And one of the most visible ways it is changing is in the addition of an 'extensive' green vegetated roof to many buildings.

A green roof on a building will have a positive impact aesthetically, environmentally and financially to society, the building occupants and the building owner. Reduced summer and increased winter roof temperatures lead to lower energy consumption and less stress on the roofing membrane, and the profile of the green roof retains, detains and filters storm water. The green roof also significantly improves the looks of a traditional roof, whether black or white.

Design criteria

When a client asks you to get involved with the design of a green roof, what are some of the key elements to create a good looking functional roof that will last a long time? The single most important design criteria is to make sure that whatever you design on the roof never interferes with the primary function of the roof; to keep the interior of the building dry. It is, therefore, important to make sure that a building has a roofing membrane that is designated by its manufacturer as qualified to carry a green roof. It should be in good shape, and it needs to be tested for leaks prior to the installation of a green roof. You should also get a structural engineer to verify that a building is capable of carrying the additional load that the green roof will add to the roof. Then choose a green roof system from a reputable manufacturer and match your clients' roof design load to the manufacturer's specifications. Make sure that the weight specs specify fully saturated (flooded) media and fully grown plants. You want to be safe rather than sorry when it comes to the design load of your green roof. As a reference, remember that 4" of water will weigh almost 20 pounds per square foot (psf).

Of course plants are what make a green roof green. Extensive green roofs are classified as such because they require relatively minor modifications (or none at all) to the load bearing capacity of a structure and are populated with plants that are tough both in winter hardiness and drought tolerance. The only eco-type that has any level of comparison to an extensive vegetated rooftop is an 'Alvar'. In addition to the comparison with the shallow, stony, rapidly draining soils of the Alvar, most green roofs are also very exposed to all the extremes mother nature can throw at it. As a result, only relatively few plant species will survive and thrive on a rooftop.

Your design palette will be directly related to the depth of the growing media and the frequency of irrigation during the summer months. A media depth of 2.5" will give the lowest design weight of 15 psf, but will also severely limit the number of plant species that can be successfully grown and will require fairly frequent irrigation. At the other end of the scale, at 6" of depth (45 psf), the design weight of the green roof will start challenging the cost with structural reinforcements of the building, but the greater depth will provide a much broader plant palette to work with and lower irrigation requirements. A 4" depth is generally a good compromise and gives you a fairly broad palette of succulents and alliums to work with and requires minimal irrigation (however they are living plants and will require some water).

In your design it is highly recommended that you use mixtures of plants, much like you would when designing an English cottage garden (although an entirely different palette, and a lot shorter in stature).



Kees Govers is the principal of Caradoc Green Roofs Ltd. He has a Bachelors of Science in Agriculture from the University of Guelph and has been a grower of perennials and woody plants for the past 23 years. He is the licensed representative of LiveRoof prevegetated modular green roof systems in Ontario since the products' launch in 2006. LiveRoof is produced in Ontario by Hillen Nursery Inc.

Because of the nature and the extreme exposure of extensive rooftops, it is important that the media surface has a year-round vegetated cover. This will prevent wind erosion during the winter months, as well as ugly brown spots that spoil the aesthetics of the roof in summer or winter. Blending evergreen and deciduous species in the design will go a long way towards avoiding this problem. You also need to account for the orientation of the green roof in your planting design. Many green roofs are shadowed by taller buildings during part or all of the day, or alternately receive a disproportionate amount of reflected light from the glass of neighbouring buildings. Certain plants, or combinations of plants, can better withstand these conditions than others.

Since the advent of modern green roofs in Western Europe half a century ago, there has always been the fear the roofers have with regard to the potential for damage during the installation, and the cost of roof repairs under green roofs. This has held back the installation of many early green roofs. Pre-grown, modular green roof systems are changing all that. By using pre-grown modules, the roofer is now taking on the responsibility for installation of the green roof, often with a landscape contractor as a sub trade. It minimizes the amount of work required on top of the delicate roofing membrane. And it also allows for quick and easy access to the membrane should a repair ever be needed, without destroying a portion of the green roof.

Regardless of the system and design that you decide to use, European, and now North American, trends all point to a much wider adoption of extensive green roofs in the design of the buildings of the future. This is truly a brand new and rapidly growing frontier for horticulture.

For further information please consult:

'Planting Green Roofs and Living Walls' Nigel Dunnett & Noël Kingsbury Timber Press 2004

'Green Roof Plants A Resource and Planting Guide' Snodgrass & Snodgrass Timber Press 2006

www.greenroofs.org 'Green Roofs for Healthy Cities' web site: www.LiveRoof.com LiveRoof® website

in every issue

designer profile **Bob Eeuwes and Trina Beynon**

by Jennifer Hayman

A conversation with Bob Eeuwes and Trina Beynon of Markville Landscaping and Nurseries, 2008 winner of the Casey van Maris Award for execution of unique and innovative design in landscaping

If you could choose one element of this landscape that you think really sets it apart, what would it be?

Trina: Both Bob and I felt that the view from the upper level was the one element that gave this project its identity. The negative edge of the pool combined with this view makes it spectacular.

What was the original client brief and budget?

Bob: Our first meeting was very informal and it became apparent almost immediately this client was different from most, in that they love to entertain more than 300 people at a time. That kind of crowd can pose many 'use of space' challenges, so function became the important factor. The homeowners definitely wanted a pool and hot tub, a cozy patio space with a dining area and a water feature.

Given the original grades and space, did you know this was an opportunity to do something really interesting? Was the homeowner immediately open to exploring different materials?

Trina: The most obvious challenge, in conjunction with the functional requirements of entertaining 300, was the 22-foot change in lot elevation from the rear to the driveway. Bob and I could visualize the possibilities and knew that we had to capitalize on the spectacular view. The challenge was to create several usable levels, and still maintain a level of intimacy within each space. The clients were very open to new ideas. Their preference for smooth lines, square edges and a modern look gave us the basis to set the tone of the design. They were therefore happy to explore different materials to maintain this look.

Your company installed Redi-Rock Block to retain the grade. Was it easier to work with than natural stone?

Bob: The product is used primarily for commercial installations, so the tolerances and specs are reflected in that criteria. We had to take extra care in ensuring the joints and levels were as accurate as possible to minimize gaps and spaces. Was it easier to work with than natural stone? I would say no. The tolerances for the application were much tighter than the roughness of large rock in this particular project.

Access was a major challenge on this project. Can you describe some of the steps that were required? Do you have any suggestions to other designers when approaching a project of this nature?

Bob: I think the first challenge in the construction part was to determine what happens first? How do we construct the various components, and not cut off access to areas requiring large equipment? Typically you start at the lowest point and work up. On this one, we had



to start at a higher level and split the levels into phases, to prevent working ourselves into a corner. My suggestion to any landscape designer wanting to work on larger projects: acquire as much on-site experience as you possibly can. Spend time discussing projects with contractors to determine who does things, how and when. Many years ago I worked with flow charts and critical paths to help me visualize projects and provide a realistic schedule. We would paste the project flow chart on-site, so everyone could see where they fit in. By giving them 'the big picture' it allowed them to quickly realize their parameters. If their work was part of the critical path, there was motivation to stay on schedule. Delays due to weather or supply could be noted as well, so the schedule would be instantly updated. Experience with this kind of planning, I believe, is a must for larger project contractors, especially design/build companies. Without this knowledge and experience, the odds of maintaining any kind of accurate schedule are remote.



You had to work with the Toronto Ravine Conservation Authority and meet their guidelines for planting in the ravine areas. Can you tell us what steps you had to take with the TRCA?

Trina: The TRCA required us to comply with the planting requirements for the garden areas not enclosed by patios or hardscape features. The biggest challenge was to work within the budgets, and still satisfy TRCA. The pool contractor, on the other hand, had a much more difficult time since they were constructing a pool within the designated area.

The installation of this project was featured on the television program The Designer Guys. Can you tell us more about this experience?

Bob: In a nutshell, it was exciting and fun, but it added a whole new dimension to the project as well. Television production has a very rigid schedule, and with this type of project it became a logistical nightmare. I wouldn't recommend it to the faint of heart — completing a project of this nature without a TV show and its added pressures would have been challenging enough.

You've been in this industry for over 30 years. Can you tell us what has surprised you most or changed the most in landscape design?

Bob: Perhaps most surprising is that a good design is timeless. Products or materials can become dated, but the design remains timeless. The biggest changes have occurred in both hard and soft materials, with new products replacing traditional natural materials (which are inherently more expensive). Smaller, more urban land-scapes have forced growers to develop suitable plants.

As a full-service contractor, do you think the industry and the public have fully embraced the value of landscape design?

Bob: I think customers are becoming quite savvy and knowledgeable, most likely due to the Internet. The one thing not readily available is unique, custom and creative design. It's still very much an art form and will always be in high demand. The more knowledgeable the customer, the more he appreciates quality service. The biggest mistake a designer can make is to undervalue his service. If the designer doesn't value the work, clients won't either.

You have done a lot of traveling around the world. Do you think this has influenced your design approach and style?

Trina: As a designer, we tend to prefer certain styles of landscapes or designs. Traveling the world and seeing a vast number of landscapes has opened my eyes to becoming more creative. I think clients have become more adventurous, too.

featured article

"Green" is gathering steam!

By Chris Le Conte on behalf of the **Environmental Stewardship Committee**

After attending Congress 2008, the message was clear. Green has hit the "Green Industry" like a tsunami, impacting all sectors of the horticulture industry. Some believe that these "green" changes happened overnight, while others believe they have been growing incrementally over the past few years.

Whatever the case, the environment is a dominating issue in our changing world. Almost all commodities are using terminology like "sustainable sites", "environmental responsibility", or "green initiatives". It is hard to turn on the television, look at the internet or read the paper without seeing some news about a local, regional or national environmental issue. It is becoming obvious that the environment is a key political issue that is grabbing headlines and is a force for change.

It is timely that Landscape Ontario recently created an Environmental Stewardship Committee. The Environmental Stewardship Committee (ESC) consists of representatives from each commodity group. These representatives are the link between the committee, their respective commodities and the thousands of horticultural professionals that constitute Landscape Ontario membership. The mandate of the ESC is two-fold:

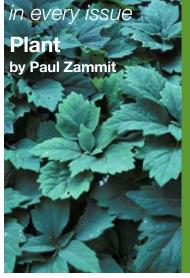
- To enhance Environmental Stewardship activities within the horticulture industry and to help the green industry understand their significance and contribution with respect to the environment.
- To raise public and consumer awareness of the environmental benefits of green industry businesses and activities. One of the first initiatives of the committee was to com-

municate its mandate back to the membership through the commodity groups, starting with an initial evaluation of where we are today. As an evaluation tool, each commodity group has been asked to make a serious evaluation of their commodity group and their businesses, generating discussion on the positive and negative impacts they have on the environment. As a guideline, four main categories were recommended for consideration:

- **1. Resource consumption**: How efficiently do they use water, fuel, air, paper, energy, etc.?
- 2. Waste reduction and recycling: Solid waste, hazardous waste, organic waste, liquid waste, etc.
- 3. Materials: Sourced locally, new efficient technology, local equipment, environmentally friendly installation techniques, etc.
- 4. Education: Does Landscape Ontario create sufficient educational opportunities? Are we doing a good job at educating our customers and ourselves? Are we sufficiently and effectively educating or marketing to political decision makers?

Overall, member feedback has been encouraging. LO members acknowledge that our business environment is changing. We know that consumers want sustainability built into their homes, businesses and lives and that the green industry should be leading the charge. Collectively we can do much more than just reduce the use of plastic bags.

Stay tuned for a regular update from the Environmental Stewardship Committee.



Pachysandra procumbens

Also known as Allegheny spurge, this is a plant I was thrilled to have become aware of several years ago. Unfortunately, it continues to remain rather scarce in the trade. Hardy in zones 5-8, this native plant does not have the typical shiny leaves we associis an attractive muted green with grey overtones that combines nicely with many other garden plants in part to full shade. Fragrant spikes of creamy white blooms emerge above the foliage in spring. I particularly enjoy the rich burgundy colour of the leaves in autumn. Although it is an evergreen in warmer zones, plants are deciduous in colder climates and therefore the previous year's foliage should be cut back in early spring. Plants are clump forming with a moderate to slow spreading habit and will grow 8-10 inches (20-25 cm) in height. While I have successfully grown this plant in a sandy soil, it prefers a loam base soil enriched with organic matter. Although P. procumbens is not a stand up and knock your socks off perennial at first sight, this native is a reliable garden performer with multiple seasons of appeal that I believe more designers and

The responsible use of water

By Chris Le Conte

As a member of Landscape Ontario's Environmental Stewardship Committee (ESC), I have had the privilege to meet with the landscape design group to discuss the ESC mandate, gather feedback and take a whole lot of abuse for being part of the irrigation industry. To be honest, the criticism has been very constructive and eye opening.

During my meeting with the design group, it became very clear that there is far too much water being used to irrigate our landscapes. For whatever the reason, be it the seasonality of our business, the "mad rush" of a dry season or simple lack of time in the day, irrigation systems operate on pre-set schedules with no adjustment for weather and no thought for water conservation. The end result is over watering, plant disease and a landscape that just doesn't look as good as it should. Luckily, there are new solutions to this irritating problem.

Weather based irrigation is not new. It has been proving its ability to save water and promote healthier landscapes for over 15 years. Weather based irrigation consists of a SMART Controller that integrates with an existing irrigation system to conserve water and promote healthier plant material by eliminating overwatering. As the weather changes, so does the moisture loss in your landscape. A SMART Controller uses local, high quality weather information and the water management principle of Managed Allowed Depletion (MAD) to adjust irrigation schedules. MAD results in deeper, less frequent watering by allowing the soil reservoir to deplete (instead of a pre-set schedule always keeping it full), and by only using irrigation when the last drop of precipitation has evaporated. Now oxy-

gen can reach the roots of the plant. The final result? Potentially, millions of gallons of water saved, thousands of dollars saved and a higher quality, attractive landscape that uses water responsibly.

Responsible water use is more than SMART Controllers; it also implies rainwater harvesting, water re-use and consideration of site conditions such as slope, exposure, soil and plant type. Responsible water use needs to start with communication and collaboration between the irrigation contractors, landscape designers and landscape maintenance companies. Our challenge is not to create water efficient products. That has been does for us. What we MUST do as an industry, is find a way to get these products on to our sites and into the hands of our customers. Lack of education, time or personnel are not an acceptable excuse. We should all be asking for help before our customers, or other decision makers, force us to change our wasteful ways through restrictions or legislation.

Water is life to our landscapes, our businesses and our livelihood. It is becoming a more expensive, scarce and energy consuming resource. We must use it responsibly...



Chris Le Conte is
President of SMART
Watering Systems.
SWS specializes in the
implementation of water
saving technologies such
as SMART Controllers, low
volume or drip irrigation
and Rainwater Harvesting.
Chris is a member of the
Environmental Stewardship

Committee, Irrigation Commodity group and a member of the OWWA (Ontario Water Works Association) committee.

Visit www.smartwateringsystems.ca for more information

in every issue

upcoming events

August 21, 2008

Designers Garden Tour, Niagara-on-the-Lake Watch for flyer. Space is limited!

October 21-22, 2008

Garden Expo/Florist Expo Toronto Congress Centre 650 Dixon Road www.gardenexpo.com

November 20, 2008

David Suzuki Lecture John Bassett Theatre Metro Toronto Convention Centre, North Building

In Review: Landscape Designer Conference 2008

By Tony Lombardi, Conference Chair

Part of the difficulty with having a fulfilling and successful event is following it up with an "equally fulfilling" and "equally successful" event. The first annual Landscape Designer Conference from 2007 was a stimulating and eagerly anticipated event. With the great turn out and response, we were faced with organizing a new agenda to stimulate the "information hungry" appetites of the 175+ Landscape Architects, Designers, Contractors and students who registered for 2008. The response to our Conference this past January confirmed that there is a need for such events and the demand is certainly there.

Every industry and profession should take an opportunity to bring their members together to share, discuss and relay information, which develops communication on many different aspects in our field of work. The Landscape Designers Conference of 2008 was just that. It was an opportunity to bring us all together, in one place, at one time. With Designers and Architects from all over Canada, and even from south of the border, the event touched on billing and fees, construction details, perspectives, and it introduced experienced members and their wisdom of the industry to newer, developing minds. Most importantly, the conference helped to reinforce the benefits of (CLD) Certification and continuing education. The event was a rewarding opportunity to share our community successes but also highlighted the discussion of topics in our profession, which need improvement.

We received a great deal of positive feedback this year which we will most certainly use as a stepping stone to develop a successful agenda for next year. We have already begun planning for 2009 and are anticipating another crowd of hungry designers looking for that little extra bit of edge, making them that little bit better in the profession of Landscape Design.

here are some of the comments we received from this years conference

"Wonderful, Had a great time!!!"

"Excellent day!! Bravo!!!"

"Keeps getting better! Keep up the good work!!"

your Landscape Design Commodity group the board

chair & provincial board rep Beth Edney, CLD vice-chair & education advisor Don Chase, CLD past chair Ron Swentiski, CLD treasurer & conference chair '08 Tony Lombardi, CLD ontario rep, CNLA Haig Seferian, CLD staff, CNLA Joel Beatson, CLP member Nancy Collins member Janet Ennamorato staff, LO Denis Flanagan, CLD contractor commodity group liaison Harry Gelderman newsletter Jennifer Hayman member Judith Humphries, CLD member Alice Klamer educational advisor Ron Koudys, CLD member Jay Middleton meeting coordinator Kathleen Pugliese member John Scanlon member Greg Scarlett, CLT ottawa rep Patricia Stanish, CLD

CALL TO ACTION: As part of our ongoing commitment to being green, we want to hear from you!

Tell us what kind of things you are doing as a designer and/or a business owner to make your life and your designs greener.

Please send us your thoughts at suelamb@cogeco.ca