

2012 Annual Report

Greenrock's Mission is

Changing the Mindset

**by engaging the community to share sustainable
solutions.**

President's Report

I took over as Greenrock President from Andrew Vaucrosson in September 2011. Andrew was President for 6 years and steered Greenrock to a position of great strength in the community. We would like to thank Andrew for his years of service and for his outstanding contributions to Greenrock and to the community. We are now considered the 'go-to' organization for sustainability issues, and are frequently consulted by the media and the Government.

In support of our advocacy work we have increased and formalized our communications with the community: putting more emphasis on a current, comprehensive, interactive website, ably managed by Carol Dixon, using our Facebook page to stream current issues or topics of interest, and maintaining a monthly newsletter. We maintain a blog on the website and write a monthly "Greenrock Says" column for the Royal Gazette.

In July 2011 we conducted a formal strategic planning process – redefining our mission and vision statements to make them concise, memorable and helpful. We also identified 4 projects and 4 ongoing programs and events to focus on in the coming year:

1. **Healthy Harvest** – now in Phase II, this initiative seeks to establish community gardens and orchards around the island to promote the health and environmental benefits of growing and consuming locally grown food.
2. **Hydration Stations** – Public water fountains with proposed locations around the City of Hamilton
3. **Green School Handbook** - developing a 'green school handbook' for all schools in Bermuda. This is based on the Pilot Green School Project with Elliot Primary School in 2010/2011.
4. **Earth Day Student Video Competition**– an opportunity for students to show their creativity and to have their voice heard. Students were asked to make a 3-5 minute video and submit it by Earth Day 2012. A public screening and announcement of the results was held in May.

Programs and Events:

- **Green Building Forum**: an idea-sharing and networking forum on the topic of sustainability with a membership of about 50 companies.
- **Green Workplace Awards** Sponsored by the Green Building Forum.
- **Earth Hour**: an annual worldwide event (in which millions participate) which demonstrates the power of individual actions in effecting big changes. Associated with this, the Living Green Expo brings together green/sustainable vendors in a community setting for families to learn more and enjoy.
- **Greenrock Education Council**: Established to guide the Green Schools program from the strong base of the School Roadshow and the Green School Pilot Project with Elliot Primary.

Other exciting developments were Greenrock's involvement in the Bermuda Alliance for the Sargasso Sea, and subsequently in the World Ocean's Day event on June 8th 2012.

The Management Committee has once more risen to the challenge of supporting of all of these initiatives and ensuring their success. My focus as President has been to continue the work Andrew started introducing a more formal structure and process into an organization which has grown fast and been highly effective, but was finding that lack of structure was limiting our effectiveness. I introduced a regular calendar and a strategic

planning process which includes more stakeholder input and rigorous test for project approval. Greenrock continues to grow and strengthen and we were delighted to be recognized by the Best of Bermuda Awards 2012 as “Best Booster for the Environment”.

One significant challenge this year has been fund-raising. Andrew, supported by his Vice-President, Nick Campbell, was the primary engine of fund-raising, but new responsibilities for Nick, and Andrew’s retirement meant we needed a new approach. We established a fund-raising committee in late 2011, but unfortunately found that this distributed responsibility was ineffective. We have also found that the economic downturn has had an impact on our average grant and donation. In April 2012 I took over the fund-raising responsibility, and since then have been learning the ropes. I am pleased to report that the donations are slowly picking up again and that our circle of donors is increasing.

Thank you to the Management Committee for their ongoing support with no compensation other than the psychic satisfaction of helping to save the world, and for the continued support of the Bermuda community.

Judith Landsberg
Greenrock President
July 2012

Current Projects

Healthy Harvest –

First introduced conceptually by Greenrock in 2009, this program is aimed at establishing community gardens and orchards on the island as part of an overall effort to revive Bermuda's local food production and consumption. Through Healthy Harvest, Greenrock hopes to re-engage the community by getting everyone involved in planting, harvesting and eating local produce.

The Healthy Harvest project is well on track to meet the goals and milestones agreed with Catlin, the primary funder:

- The Sunshine League garden is well established and moving towards being self-sustaining
- Two more gardens (Windreach and Kaleidoscope Arts Foundation) are ready to start building pending funding. Funding applications have been sent out.
- Preliminary agreements have been reached with the Brangman home for girls and planning is underway
- Three more gardens (The Boys' Home, Westmeath, and Focus Counselling) are in the early stages of discussion

Funding is proving a tough sell because most funders are giving priority to human and social services. We have identified companies with existing relationships with the gardens' proposed locations and submitted funding applications.

Sunshine League Garden: This has been a steep learning curve: Notwithstanding generating a legal agreement between GR and SL, the project has taken 15 weeks to develop from an initial garden plan to planting and maintenance. Costs have been carefully tracked and with donations in kind actual costs are approximately 50% of real costs per square foot. The gardens are currently holding corn, bush beans, cucumber, tomato, lettuce, kale, Swiss chard, beetroot, eggplant, zucchini, okra, peppers, sweet potato and an array of herbs used to as pest deterrent and for consumption. In addition four fruit trees (nectarine, fig, mulberry and plum) have been planted. These are fairly mature trees and will fruit over the course of the next two seasons (one year). There are 3 volunteers who attend the site every other day to water and weed. It takes between one and two hours for this task. We estimate the gardens consume between 200 – 1000 gallons of water per week depending on rainfall. Omari Dill, the project Director, estimates he is on site approximately 3 hours per week to overview. The gardens are maturing evenly and we are very pleased with the produce thus far. Signage is to be completed this week and the "Catlin/Sunshine League Gardens" formally opened the first week of June.

Lessons Learned: The key has been to develop an operational model that can be implemented successfully. Establishing sustainable community gardens has been challenging and, sadly, many of these gardens in Bermuda have become unproductive. In developing our Healthy Harvest sites, and meeting with prospective HH partners, a number of issues have emerged as the major factors in sustainability. The bottom line is that if a garden is not going to be sustainable then it should not be created. We are

developing a model that ensures long-term sustainability and guides prudent project building. Important areas to discuss and resolve in advance are:

1. Project management and administration, in particular succession – Greenrock does not intend to be the long-term manager of the gardens.
2. Volunteers
3. Tools and equipment
4. Potential properties, licenses and planning permission
5. Managing produce
6. Water
7. Composting
8. Seed bank and seedling nursery
9. GREC and the role of school gardens
10. Training and Apprenticeship opportunities

The Healthy Harvest project continues to flourish and new gardens will be planted in 2012/2013

Hydration Stations –

Otherwise known as waterbottle re-fill stations, they help to promote a sustainable way of living by encouraging waste reduction and a healthier lifestyle. They serve to encourage use of reusable, earth-friendly drinking bottles and provide the community with access to a convenient source of safe, filtered drinking water, particularly for those pedestrians on-the-go. In 2011 Greenrock partnered with AES (who provided the funding) and with the City of Hamilton to install 6 hydration stations in the City of Hamilton using the Aquafil model (bottle re-fill station). Environmental messages discouraging the purchase of disposable water bottles were included in the artwork on the side of the stations.

The project also supports another Greenrock initiative with several non-profit partners called the Bermuda Marine Debris Taskforce, whose mission is to raise awareness and educate the community about the harm that plastics can have on our marine environment.

The project has included:

- Working with the City of Hamilton and Watlington Water to establish a map of local water mains throughout City of Hamilton.
- Sponsorship to fund all six of the stations.
- Installing Six Hydration Stations in June and July 2012 and working with the Department of Public Health to establish an ongoing testing program
- Metering, monitoring, and maintenance the stations (services provided by the City of Hamilton)

Greenrock is currently exploring the possibility of installing further Hydrations Stations in town centres at the east and west ends of the islands. Both areas are popular tourist destinations and large numbers of plastic bottled water containers are currently sold and, subsequently, discarded here.

Green School Handbook – A draft of the Green School Handbook was produced earlier this year. It is an impressive document that takes many of the lessons learned from Elliott Primary and combines them with local case studies overseas examples to make a resource which is of value to all Bermuda schools. This project has currently been shelved because of a combination of lack of resources and the revamping of the Greenrock Green Schools

Program under the Greenrock Education Council. We hope to resume work in this before the end of the year.

Earth Day Student Video Competition:

This project was carried out in collaboration with the Bermuda National Trust and was tremendously well received by students and the broader community. There were 16 entries with film screening and prize giving held on May 15th. Lara Hetzel of BHS received first prize with her imaginative and beautiful video following the path of a thin film plastic bag from a kitchen counter into the sea as floating trash. Warwick Academy won the main school award and would be receiving a "Sense of Place" process experience to be put together in conjunction with Greenrock Education Council initiative. LookTV aired all of the videos on National television. All the videos are available on the Greenrock website.

The competition will be held again in 2013. This year's videos's will provide wonderful publicity, and we hope to have increased coordination within the schools and closer technical support for the students.

Green Workplace Awards – The second annual Green Workplace Awards were launched in April and completed in June, once again in partnership with *The Bottom Line* magazine. The awards concept was born from Green Building Forum members who expressed a desire for businesses to be acknowledged for sustainable and environmental actions, and to inspire others to do the same.

Entry criteria included companies writing a brief narrative about their efforts in the areas of Environmental Impact (e.g. electricity and water usage, recyclables, reduction in energy bills), Green Policies (e.g. green cleaning products, indoor air quality/healthy building policies) and Office Initiatives (e.g. projects in the areas of innovation, education and community support).

Fifteen final submissions were received in the following categories: Tenant, Owner/Occupier, Building Manager, Retail, Schools (a new category), Hospitality, and Government (another new category). An independent panel of judges selected winners from each category, with those winners being featured in the December 2012 issue of *The Bottom Line*.

We were disappointed that submissions were down on the previous year and have decided to change the timing for the next Green Workplace Awards in recognition of the fact that the first quarter of the year is the busiest for Greenrock and therefore the GWAs did not get the attention needed to make it very successful. In 2012 the GWAs will be run in the third quarter of the year and published in the April issue of the Bottom Line Magazine – this allows them to be announced at Earth Hour and published during Earth Month.

Programs

Greenrock Green Building Forum - After expanding the Green Buildings Forum to a mailing list of about 50 companies, Greenrock introduced a corporate membership program. It was felt that the GBF provided enough value, with extra supporting information on the website, so companies would be willing to pay for the benefits. This went well for a start with 20 companies joining initially. This number is slowly increasing as we promote the forum.

In addition to corporate members, representatives from various government departments are invited including Dept of Energy, Sustainable Development & Airport Operations.

Meetings have been held at member companies every two months (January, March, May, September) the average turnout is about 20 people. The Largest meeting was at Tuckers Point in March (great venue and excellent lunch provided!). The format has been consistent – Greenrock updates – round table discussion to introduce and share ideas – presentation on a topic.

Topics for the forums this year have been:

January Green cleaning products (Hiscox, BAS Serco, Butterfield & Vallis)

March Renewable energy (Dr. Anne Glasspool)

May Dept of Planning City of Hamilton plan (Dept of Planning & CoH)

September Indoor Air Quality (Dr Kent Simmons)

Feedback from participants has been very positive. There is a core group of people who attend every meeting with other companies rotating representatives from their green teams. This keeps it fresh with some new faces at each meeting.

The main goal of the forum is networking and idea sharing and to that end it has been very successful based on the feedback from participants, green practices implemented in their companies and entrants into the Green Workplace Awards.

The Corporate members website is in operation and a blog site has been created by Carol Dixon. Topics to populate the blog and persons to administer are still being worked out but we have a few volunteers from the GBF.

Greenrock Education Council (GREC):

Over the last few years, Eugene Dean’s presentation of the Greenrock School Roadshow (GRS) has been very successful at inspiring student interest in environmental education topics. GREC recognizes the presentations open up an opportunity to follow up with schools to explore the possibility of GREC members either working with an existing Green Club or forming a new one.

This summer GREC identified its mission: *to actively support schools to identify and implement projects and initiatives that bring about positive environmental change in the school community.* GREC has generated a Greenrock Schools Handbook and developed a series of project briefs including waste management and energy topics, school gardens and ecological mapping and assessment. The goal is to follow up with each school immediately following GRS and determine whether there is commitment to form a Green Club and have GREC support the students and an assigned teacher to design and implement a project of their choice.

We are hoping to work with six or seven schools that are able to assign a staff member and prioritize adequate time to develop this initiative. GRS will take place in all of the schools this year. Preliminary conversations with several of the schools principals

indicate there is interest in the initiative and we are hopeful this initiative may be expanded as we continue to learn how best to deliver these types of programs.

Events

Earth Hour - each year, Greenrock works with the World Wildlife Fund in promoting Earth Hour in Bermuda. In March 2012, we hosted a public gathering held for the second time on the steps of City Hall with an expanded program and between 600 and 800 people attending (participation was very fluid as people came and went during the evening). Environment Minister Marc Bean and City of Hamilton Mayor Charles Gosling provided their perspective on the importance of Earth Hour and why it's important for all of us to work together on reducing our impact on global climate change.

Activities included:

- Belco's successful schools essay competition
- Excellent local entertainment
- Expo of green products and services
- Information from local sustainability-focused organizations
- Free environmental movie screening
- Belco's new bike generators
- Green Workplace Awards Presentation
- Family Fun (no electronics)

Earth Hour 2012 not only allowed Greenrock to continue our community partnerships with Government and private and public stakeholders in raising awareness and encouraging individual and business participation, but to commit to going 'Beyond the Hour' (the year's global theme) by engaging with companies in announcing the launch of the Green Workplace Awards at the Public Gathering.

Earth Hour provides the opportunity for Bermuda to reflect on its energy consumption and to look at ways we can make a difference in our own behaviors when it comes to energy usage.

World Ocean's Day:

As part of our collaboration with the Bermuda Alliance for the Sargasso Sea (see below) Greenrock participated in World Ocean's Day on June 8th 2012. This was a very successful event with more than 200 people attending a cocktail party with booths from all of the environmental charities and presentations from Chris Flook on the proposed "Blue Halo" marine reserve around Bermuda, from Dr Philippe Rouja on the importance of the marine environment to humans, from Dr Tammy Trott on the role of the Department of Conservation Services, and from Tim Noyes on the science conducted at BIOS.

Other activities

Greenrock is a proud partner in the Bermuda Alliance for Sargasso Sea (BASS) — a collaboration of ten leading conservation and scientific organizations seeking to protect the rich biodiversity of the Sargasso Sea.

BASS was formed to support efforts by the SSA (made up of Bermuda government and its international partners) to ensure that the globally significant natural environment and unique biological richness of the Sargasso Sea is conserved for present and future generations. BASS members are Atlantic Conservation Partnership; Bermuda Underwater Exploration Institute; Bermuda National Trust; Greenrock; Bermuda Institute of Ocean Science; Bermuda Sloop Foundation; LookBermuda Education Foundation; National Museum of Bermuda; Bermuda Audubon Society; and Bermuda Zoological Society.

The Bermuda Government Energy White Paper:

In 2011 the Bermuda Government released their Energy White Paper. Greenrock has been part of the consultation process for the Green Paper and supports the findings of the White Paper – a useful and comprehensive document. However it's very size makes it hard to digest, and therefore at a special meeting of the Greenrock Management Team in March we reviewed the findings and developed a response which we have publicized and used in our advocacy to the Government and communications with the public.

Here is Greenrock's summary of White Paper priorities:

Goals for 2020 stated by the Government in the White Paper (using 2008 as benchmark):

- Electricity use cut by 20% by 2020
- Emissions reduction 30% (of 2008 level) by 2020
- Contribution from renewables up to 30% by 2020

Priority actions to reduce electricity consumption:

Note: reducing peak demand for BELCO (without changing total consumption) will reduce electricity generating capacity requirements, and therefore the urgent need for new investment.

- Consumer awareness:
 - o Device monitoring
 - o Better information on electricity bill
- Sub-meter tenants and require efficiency standards for any of the highest level customers. Including mandatory energy audits
 - o Apply efficiency standards to A/C and other large appliances
 - o Phase out incandescent lights
 - o Apply efficiency standards to water heaters – encourage heat pumps.
- Tie electricity use to financial assistance (provide energy audits)

Priority actions to reduce emissions:

Reduction in consumption will lead directly to reduced emissions.

- BELCO: mandate co-gen and/or combined cycle generation **before** building new capacity.
- Vehicles:
 - o Electric mopeds for under 16s
 - o Rebates and subsidies for fuel efficiency
 - Taxis
 - Private cars

- Tie emissions to vehicle licensing fee
- Incentives, tariff protection, efficiency standards for all NEW vehicles
- Electric vehicles
 - All government vehicles: Partner with major auto makers to establish a market
 - Government work with private company to establish battery exchanges – solar-charged (only need 3)
 - Better education and information including information about emergency backup – what happens when it runs out?
- Lifestyle:
 - Cycle routes and cycle commuting
 - Car-pooling: consumer education to promote this
 - More extensive school bus network

Priority actions to increase renewables to 30%

Once again tied to electricity use: 30% demand reduction reduces the renewables target to about 17MW

- Zone seabed and size lines for WIND. [Energy Commission issue]
 - Use IT to predict wind output so that it provides baseload
 - Consider linking to BASS/PEW initiative for seabed zoning
 - Collaborative planning for new generators:
 - Grid management
 - Size new undersea cables
- Encourage major alternative producers:
 - BELCO restructure rates so that the highest demand level (realistically) reflects the most expensive generating capacity. This will make renewables more economically attractive for businesses
 - Offer decent feed-in tariffs;
 - Look for creative ways to encourage alternatives:
 - BEESG: not strictly speaking renewables (is the 20MW real?)
 - Government buildings and schools
 - Commercial buildings
 - Separate out grid management costs from generation
- Feed-in Tariffs: be more creative and generous:
 - Require smart meters for renewable installations then offer tariff based on time-of-day of generation (once again realistically reflecting generator cost)
- Single step planning process for renewable installations (belco app, govt app, building control).

Goals for 2012/2013

It has become clear that to move forward Greenrock will need to rethink its legal and management structure as well as its sources of funding. Therefore, while we continue to deliver high-impact projects and broad-reaching programs, we will also focus on the following goals for 2012/2013:

- Establish an Executive Board – There are challenges with our current single-layered management structure: members of the Greenrock Management Team are also paid as consultants or as employees, therefore discussion of these roles and the financial commitments that they entail become difficult. In addition we feel that a monthly management meeting of volunteers involved in executing the projects does not

provide sufficient oversight of financial management. Finally, we feel there would be benefit to the strategic and business insight, as well as the fundraising reach, of having a senior corporate patron as Chair of the Board. Therefore we resolve to establish an Executive Board:

- consisting of up to 6 members
- to provide financial oversight and approval of the annual Strategic Plan:
 - which meets once a quarter to review the financial statements approve expenditures on new projects approve payments to members of the committee under section G of the constitution "Conflicts of Interest"
- Explore changing the legal structure of Greenrock, probably to that of a Company Limited by Guarantee: What are we trying to solve?
 - Liability: Events, Schools, Hydration Stations
 - Assets: who owns the HS (and other sundries)
 - Professional image: provide a clearer legal entity for contracts, board discussions etc
- Open new avenues for fund-raising. Our experience over last year is the companies and foundations, while sympathetic to environmental and sustainability initiatives, feel an obligation to address immediate need in the current economic downturn. Therefore the focus of most companies in the charitable giving has been tightened to immediate human and social need. While we make the case that reducing resource use has an immediate and long-term economic impact, it is becoming harder to compete for corporate funds. Therefore we plan to access the tremendous goodwill that Greenrock has in the community through a donations drive, a restructured membership program (currently free) and through a fund-raising event in 2013.

In Closing

2011/2012 was a successful year for Greenrock with some big wins but with financial challenges which we are working to overcome. In the rest of the world global climate change deniers gained ground and the global financial crisis and economic downturn took the focus off long-term sustainability issues. However, we remain optimistic. People in Bermuda are slowly taking more of an interest in sustainability: the economic situation has focused attention on the cost of electricity and imported goods, both financial and in terms of emissions, and as the weather becomes more unpredictable the dangers of ignoring the impact of climate change on our island become more obvious.

Long-term, sustainable change will only occur when individuals act together for the common good of the planet. The same is true for Bermuda. We need to all work together to help make Bermuda a more sustainable place to live from an economic, social, and environmental perspective. Greenrock's mission is to engage the community to share solutions for a sustainable Bermuda.

Thank you for your support.

If you would like to receive our monthly newsletter, please sign up on the front page of our website.