

Spring 2011

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LETTER FROM THE COMMITTEE

Dear Friends,

After a dry winter we wonder what spring has in store for us! Perhaps all of us should look again at being waterwise in our homes and gardens. However, we still can enjoy the display nature puts on for us!

IMPORTANT!!! This year we are celebrating the **20th anniversary of the Friends of the Liesbeek** and we are very proud to belong to such an active environmental organization. To celebrate the occasion we would like to ask all members and interested persons to **contribute photographs, poems, newspaper articles or anecdotes** – be creative! Please let us have your contributions before the end of October so that we can set up a display on the **anniversary of the founding meeting of FOL, Monday 28th November.**

PLEASE HELP: We would also like to **honour past committee members and ask that if you were a committee member or know of someone who was active in FOL in the past,** to send us an email, post a message on the website or call Francine at 021 6715385. Our email address is secretary@fol.org.za and our postal address is still P.O.Box 333, Rondebosch.

Warm regards, The Committee

SPRINGING INTO LIFE

From July – December each year many exquisite annual geophytes come into flower in the Western Cape. These geophytes lie dormant during the unfavourable dry summer months, but after the winter rains erupt into growth, taking full advantage of the first spring sunshine. They reach flowering maturity and set seed quickly, before other plants can outcompete or shade them, eventually dying back and relying again on their various underground storage organs for food until the next season.



FIGURE 1 MORAEA ASRISTATA, FLOWERING IN SEPTEMBER



FIGURE 2 SPARAXIS BULBIFERA, FLOWERING SEPTEMBER - OCTOBER



FIGURE 3 MORAEA SPECIES



FIGURE 4 MORAEA FLACCIDA, FLOWERING AUGUST - OCTOBER



Figure 5 *Chasmanthe floribunda*, flowering June – September ; Figure 6 Arum lily, *Zantedeschia aethiopica*, flowering June - December

There are many different species of plants which utilise these underground storage organs (geophytes). These organs may differ structurally (bulbs, corms, rhizomes, tubers) but all serve the same purpose of enabling the plant to survive during unfavourable conditions. Many geophytes will only grow after a fire has swept through the area, lying in wait until the correct conditions are experienced. This presents a problem for natural areas situated directly adjacent to urban areas, where fire is considered a hazard, and must be prevented at all costs. One particular species of extreme interest is that of the rare *Moraea aristata*, which is now only found on the grounds of the South African Astronomical Observatory, where a small population has been able to survive the impacts of human activity. **Beware**, it is illegal to harvest wild flowers from City land or declared Nature reserves, unless the harvester has permission from the land owner. Harvesting of these flowers prevents pollination and seeding from taking place and also removes vital habitats for indigenous fauna species. A prime example of this is the Arum lily frog, which only lives, feeds and breeds in the flowers of the Arum lily.

How can you help?

There are two ways to help save our indigenous geophytes, particularly Arum lilies. Firstly, please **do not** buy any flowers from vendors selling them at the robots. If we remove the market for these flowers it will make a massive difference to the survival of the flowers and associated species.

Secondly if you see anyone harvesting flowers or selling them at the robots please contact the City law enforcement on 021 5961999 or email LawEnforcement@capetown.gov.za.

Photos and article by James Cooper.



2011 is WESSA's 85th birthday
see the WESSA website for more information.
<http://wessa.org.za/useful-information/85th-anniversary.htm>

2011 is the UN's International Year of Forests

The United Nations General Assembly has declared 2011 as the International Year of Forests to raise awareness on sustainable management, conservation and development of all types of forests. Forests cover 31% of our total land area. Forests are home to 80% of our terrestrial biodiversity. Forests are home to 300 million people around the world. The livelihoods of over 1.6 billion people depend on forests.

WESSA Share-Net has put together an exciting resource pack to support the International Year of Forests 2011.

*To order contact
sharenet@wessa.co.za or
call 033 330 3931 ext
124/144.*

Purple Loosestrife Update

While single Purple Loosestrife plants found along the banks Liesbeek have been easy to control in the past two years, those found as dense stands in *Phragmites* reed beds have not. Accessing plants through the dense reeds provides one problem and adequately treating them with herbicide, another. To combat this, the LMP team began clearing reeds before the Loosestrife growth seasons (spring and summer), cutting them as low to the ground as possible using a brush cutter, piling the brush on site to prevent seed dispersal. The first section in the Valkenberg Wetlands was cleared in May and monitored closely. The results were very interesting. As we moved to the beginning of July it was noted that the *Lythrum* had begun to resprout from root stock (figure 7), and that the disturbance and removal of the reeds had enabled thousands of *Lythrum* seeds to germinate and begin to grow in a concentrated area (figure 8), something we hadn't seen before.



Fig 7 Loosestrife sprouting from root stock



Fig 8 Dense stand of Loosestrife seedlings

LYTHRUM SALICARIA

(Purple loosestrife)



Purple loosestrife is an aggressive, competitive wetland perennial from Eurasia that has invaded vast areas of the northern US and Canada, forming dense stands. The plant produces beautiful spikes of purple flowers (and an abundance of seeds) in summer and is most visible at this time. The appearance of purple loosestrife on the Liesbeek River in the Western Cape was noticed by Liz Wheeler of Friends of the Liesbeek, about 2 years ago. The Friends have tried to control the plant since, but it is proving difficult to remove as it grows amongst other riparian plants and is well rooted. The EDRR Programme, together with Friends of the Liesbeek and the City of Cape Town and SANParks, are currently developing an intensive control plan (focusing on physical removal) for *Lythrum* on the Liesbeek River, as the population may be small and localized enough to attempt complete eradication. It is estimated that controlling this plant across 19 American states would cost about US\$ 45 million per year (2002 estimate). *LYTHRUM SALICARIA* and *MELALEUCA QUINQUENERVIA* have been designated as 2 of the top 100 worst invasive species globally, according to 2 criteria: the seriousness of impact on the environment and humans; and their importance in illustrating issues relating to biological invasions (ISSG, 2000).

If you see this plant contact EDRR :
E-mail: EDRR@capetown.gov.za
Ms Taryn Rossenrode or
Louise Stafford
Tel: +27 (0)21 712 1944 /1434
Fax: +27 (0)21 712 927



Thank you Tuffy!

Tuffy Brands is actively involved with keeping the community and the environment clean and tidy. Refuse bags are regularly donated to the Friends of the Liesbeek and one day's work on the river a week is sponsored by the company.



The Friends of the Liesbeek thank SAB for their continued support. SAB provides funding, storage space and other support to the Liesbeek Maintenance Team. It is important to know that SAB adheres to strict standards regarding discharging water at the end of the production cycle.

For the past two years the company has partnered with the World Wide Fund for Nature (WWF), and the Working for Water Programme to initiate a novel water neutral scheme.

SAB aims to reduce its water consumption in the brewing process and then quantitatively offset the remaining water use by investing in projects that clear alien vegetation. This process releases similar volumes of water back into natural ecosystems. This project cleared sufficient alien vegetation to allow for the complete offset of water use at SAB's Ibhayi Brewery in Port Elizabeth and its Newlands Brewery in Cape Town.



The Friends of the Liesbeek wish to thank Abax for their generous support. Abax Investments which traded as Polaris Capital from the firm's founding in 2003 until it changed its name in late 2009, is a specialist domestic South African listed Equity Fund Manager.

Birds on the River: Cape Thick-knee or Dikkop

The Cape Thick-knee (Dikkop) (Scientific name: *Burhinus capensis*) is a bird that is large enough to be spotted easily once one adjusts to their effective camouflage.

The special characteristics of this species are its large yellow eyes and its long legs. The large yellow eyes are an adaptation to being crepuscular and nocturnal (active at night). Their long legs appear to have thick knees coining the phrase Cape Thick-knee though, the actual part that looks like a thick knee is not the knee but the heel of the foot.

These birds are very tame and will only move from their spot if you approach very closely. The males do become aggressive and territorial when they are protecting or defending the young. Thick-knees are usually quiet birds during the daytime and quite noisy during the darker hours when they are active. Thick-knees flock with their own kind and tend to be monogamous.

The nesting season is generally the most vulnerable time for these birds and is usually from August to September. They will feed on a range of foods including but not limited to; grass seeds, insects, small lizards, rodents, snails, crabs and even an occasional frog or two.



Article and photo by Francine Becker

LIESBEEK – Only one BEE but many bee hives!

The upstream part of the Liesbeek is characterized of fairly pristine waters, less liquid and solid waste material, and more diverse vegetation. While the downstream parts are characterized by litter, liquid pollution intrusion, canalized river walls, less indigenous vegetation and other depressing anthropogenic actions. Nevertheless, the lower parts of the river boast of being home to one of an amazing breed of creatures, the honey bees (*Apis mellifera*). An abundance of bees in this section of the river has been reported, with seven beehives recorded in the lower sections of the river. This phenomenon remains unknown.

Have you been wondering why bees prefer habitats such as the Liesbeek river? Bees need water to construct their nest and therefore it makes sense to find them near water bodies. Other specific factors, if any, which attract them, particularly in the lower sections of the river are still unknown.

Significance of bees in the ecosystem

Bees are well known of being major players in pollination. Pollination is the process whereby pollen grains are moved from the anther (male) to the stigma (female) of a plant. The male and female components of the plant fuse together in a process called fertilization, where seeds and fruits are form. This process is facilitated by insects, mammals, birds and wind action. These are called pollinators. Pollinators such as bees forage invariable from flower to flower, and crops get pollinated in the process. Plants may depend on bees heavily for their services in pollination.

Caution

As much as honeybees are important players in the Liesbeek river ecosystem, their effect on other specialised pollinators remains unknown. Bees may become harmful competitors. Specialised pollination is crucial for the survival of certain plant species and conservation of biological diversity. It is strongly recommended that the bee species on the Liesbeek be identified and a cost-benefit analysis performed.

It is also important that community members be cautious of bees as they may pose a serious threat when disturbed.

Article by Ntobeko Dyani

Reminder:

Nature provides us with

Ecosystem goods, such as

- food resources, raw materials, medicines and genetic stocks of plants; and
- pollinators, which play a very important part in agriculture.

Ecosystem services, such as

- the protection of water resources;
- protection against erosion;
- nutrient storage and recycling;
- carbon breakdown and oxygen production;
- contribution to climate stability;
- maintenance of ecosystems; and
- flood attenuation.

Existence benefits, such as

- recreation;
- tourism;
- cultural/spiritual value;
- research;
- education; and
- job creation.

Option benefits, such as

- the potential of finding value in plants through research, for instance an important plant chemical that can be used as medicine or for plant breeding.

(taken from Enviroworks, June 10, http://www.capetown.gov.za/en/EnvironmentalResourceManagement/publications/Documents/Enviroworks_Jun10.pdf)



Toads and Frogs: *The Cape Rain Frog*

There is a family of frogs (*Breviceps* to scientists) which is so well adapted to dry environments that they run the serious risk of drowning should they encounter anything deeper than about 5cm of water. The Afrikaans colloquial name for these kinds of frogs is 'Blaasoppie' (blow-up or inflatable), which very accurately describes their habit of puffing up into balls when threatened (with the intention of appearing decidedly larger and fiercer than they really are). Unlike the 'typical' frog face with a snout, these creatures have blunt features resembling a bulldog with a headache (complete with furrowed brow). This is one of those creatures that is so ugly, it is actually quite cute. Having described their appearance, it is quite unusual to get to see one as they prefer to spend their time in burrows – even calling males do so from the concealed openings of these burrows, into which they frustratingly retreat and stop calling when approached too closely. This is made even more annoying if you are actively searching for them as they tend to call only when it is raining. But it is their call which makes them my favourite frog. It is a haunting, almost hooting squawk which becomes more magical as other males nearby join in a ghostly chorus under the trees in the fading light as the light rain soaks the ground. Walks in Newlands forest or the Arboretum below Kirstenbosch at this time of year are some of the best places to enjoy this wonder of nature.

But I hear you scratching your head, wondering how it is that an amphibian with zero swimming ability is able to procreate. Well, that is the true miracle of the story behind this little gem. These frogs reproduce WITHOUT WATER! That old school textbook that declared every amphibian must return to water to lay eggs wasn't entirely accurate. These little marvels lay their eggs at the bottom of their moist subterranean burrows. The tadpoles complete their entire metamorphosis inside the egg; going from tadpole to little frog without ever visiting my pond. The female lays a cluster of unfertilised eggs on top of her brood to help supply the tadpoles with additional moisture during their development.

The young and adults eat a range of invertebrates and are thus an asset to any gardener as they keep pest populations under control.



Breviceps gibbosus - Cape Rain Frog

They themselves fall victim to mainly raptors and snakes, both of which they try to dissuade by puffing themselves up. But they seem to have no defence against the Hadedea Ibis, a recent arrival in the Cape. Their method of probing the ground with their long, sensitive beaks means they are easily able to find these little frogs as they hide underground. Anecdotal reports suggest that these birds may be seriously impacting the frogs' population in Cape Town. So when you hear the Rain Frogs eerie call in the rain, appreciate and marvel at these amazing creatures that share our world.

Fynbosphil

IMPORTANT: September is when the Western Leopard Toad starts to stir and this highly endangered animal is decimated by vehicles, on and off road. If you spot any Leopard Toads, please notify the Coordinator at 0722366146.

EVENTS AND NOTICES

Western Cape Wetlands Forum Quarterly Forum Meeting is on WEDNESDAY 7th September 2011 13:30 – 16:30 at Kristo Pienaar Centre, Tygerberg Nature Reserve
Contact Philippa at WESSA 0217011397 or email philippa@wessa.co.za

Clean up SA Week is from the 12th to the 17th September and **National Recycling Day** is on the 16th September

International Coastal Cleanup is on Saturday 17th September. FoL have participated for several years as a result of an article in the newspaper stating that the litter on the beaches of Robben Island came from the Liesbeek. We have usually done a cleanup on Lagoon Beach down towards the mouth of the Salt River Canal. You get there by traveling along Marine Drive towards Milnerton and turning toward the sea at the Otto du Plessis / Boundary Roads intersection. Follow the road around and turn first right. See our website for details.

Heritage Day 24th September

The Friends of the Liesbeek will be meeting on Saturday 24th September at the gate at the South African Astronomical Observatory at 17h00 for an outing to the bird hide on the Raapenberg Wetland. We will also launch our participation in the MyBirdPatch Facebook page. This is a virtual atlas where everyone can log on, ask questions and note the birds found in their backyards, and is coordinated by Les Underhill from the ADU at UCT. For more information see fol.org.za or <http://mybirdpatch.adu.org.za/>.

ATTACK OF THE ALIEN

In the previous article I promised to explain the categories to which alien invading plants belong. Initially plants were placed in one of three categories under the Conservation of Agricultural Resources Act (Act 43 of 1983). But recently, new legislation is being drafted which will place invading plants into one of 4 well-defined categories (under the National Environmental Management: Biodiversity Act, Act 10 2004, also called NEMBA). These are also specific to area, so a plant might fall into different categories depending on where in the country it is found. Obviously our different climatic and wildlife conditions across the country mean certain plants have the potential to spread better in some places while not in others. Any categories mentioned in my articles relate to the Western Cape:

- **Category 1a:** Requires immediate removal and is a plant which is not allowed to be grown under any circumstances, anywhere, for any reason.
- **Category 1b:** Requires immediate removal as part of an invasive species control programme. Basically, these plants are deemed to be highly invasive but have either not yet fully established in a location, or where data about their spread is not known.
- **Category 2:** Plants restricted by area for which a permit must be obtained. These would include several commercial forestry species which need to be limited to the location of the active forestry activity and not allowed to spread.
- **Category 3:** Invasive species regulated by activity for which a permit is required. Again, this might include 'special cases' like commercial crops or plants being grown for experimental reasons.

Notably, ANY categorised alien invader growing in a riparian habitat (alongside a river) automatically becomes classified as a Category 1a requiring immediate removal, by law.

Fynbosphil

PAMPAS GRASS



This edition's culprit is a plant which is already an established alien in other parts of the country, but which has lately started showing its propensity to spread in the Cape, Pampas Grass (*Cortadaria selloana*). It is a tall, ornamental grass with very showy tufts of seeds which are used in flower arrangements. It has a tough root system once established which must be removed entirely for control to be effective. Be careful, though, as the edges of the leaves are razor-sharp and will cut your skin easily. The flowering tufts are also known to induce hayfever and even itchy skin. Once removed, it is advisable to burn the flower/seed heads to prevent any spread of the seeds. Allow the roots to completely dry out by exposing them to the full sun for a few days. These can then also be incinerated or chopped up and placed inside a tightly tied, unbroken packet (or two) before being disposed of. As a rule: Unless you know exactly what you are doing, it is very unwise to use any part of an invading plant for compost. Many of these plants can reproduce from a cut section, and you may well be making the problem worse! Pampas Grass is very ornamental, so I recommend the best indigenous alternatives will also be showy. I suggest Thatching Reed (*Thamnochortus insignis*) or Cape Reed (*Eligia tectorum*) if you want to maintain the grassy effect. Or try a Strelitzia (like *Strelitzia juncea*) and replace the grass with some colour, and sunbirds. If you see this plant contact EDRR on:

EDRR@capetown.gov.za
Ms Taryn Rossenrode or Louise Stafford
Tel: +27 (0)21 712 1944 /1434
Fax: +27 (0)21 712 9277

Membership and donations

Due in January every year:

- Individual R30
- Family R50
- Corporate R150

We also welcome:

- Donations to the Liesbeek Maintenance Project

We will acknowledge receipt of your donation / subscription.

Please enter your contact details: address, e-mail and telephone numbers on the membership form available on our website, and send it to secretary@fol.org.za or to our postal address, along with a copy of the deposit slip, not forgetting your reference details (Initials & surnames).

Our banking details are:

Friends of the Liesbeek
Nedbank, Pinelands
Branch No: 104709
Account No: 2220015645

Cheques can be mailed directly to:

Friends of Liesbeek,
PO Box 333
Rondebosch 7701

Friends of the Liesbeek is a registered NPO Public Benefit Organisation ref no 93000280 Non-profit Organisation ref no 56-033

CONTACT PERSONS AND NUMBERS

- **Liesbeek Maintenance Project:** River Project Manager Office 021 6715385 or James 0739757513; info@fol.org.za or secretary@fol.org.za; Ntobeko 0710419424; Chester 0824329741
- **Water Pollution:** Brian February (Bishopscourt to N2 Mowbray) 0216841077/0834688243
Johan Marthinus (N2 to Table Bay) 0842995595
- **Displaced Peoples Unit:** Wayne.Aldridge@capetown.gov.za
- **Environmental Standby & Emergency (24/7):** 0834 99 1717
- **Environmental Law Enforcement:** David Morris or Vaughan Thompson 0217130510
- **Centre for Environmental Rights:** 021 4471647
- **CITY CALL CENTRE City Complaints, repairs etc:** contactUS@capetown.gov.za 0860 103089, SMS 31373
160 characters maximum. Get a reference tracking number.
- **ROADS & STORMWATER** (Potholes, flooded roads and chemical or other spills) Telephone: 0860 103054
Postal address: PO Box X1694, Cape Town, 8000 E-mail: watertoc@capetown.gov.za
- **WATER & SANITATION** (Emergencies such as leaks, burst pipes, sewer defects/blockages and complaints e.g. low water pressure and water wastage) Telephone (Account & consumption) queries: 0860 103 089
Fax: 021 957 4726 E-mail: watertoc@capetown.gov.za Website: www.capetown.gov.za/en/water
- **SOLID WASTE** (Illegal dumping, wheelie bins, cleansing, extra cleaning) Postal address: PO Box 298, Cape Town, 8000 Telephone: 0860 103089 Fax: 0860 103090/021 4004302 E-mail: wastewise@capetown.gov.za
Website: www.capetown.gov.za/en/solidwaste
- **CITY PARKS:** www.capetown.gov.za/en/Parks
- **BIODIVERSITY MANAGEMENT BRANCH:** www.capetown.gov.za/biodiversitymanagement
- **ENVIROWORKS:** Biannual newsletter. Environmental Resource Management Department, City of Cape Town, 44 Wale Street, Cape Town 8001 PO Box 16548, Vlaeberg 8018 • Tel: 021 4872284 • Fax: 021 4872255 • E-mail: enviroworks@capetown.gov.za, Website: www.capetown.gov.za/environment

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