



## ZEEKOEVLEI PENINSULA SRA "ZVPSRA" NEWSLETTER AUGUST 2021



*Grey skies...Photo: Kate Day*

### **From the Chair (Graeme Cann)**

Good Day Vleibours,

Isn't it a pity that our beloved Zeekoevlei is devoid of recreational activity over this beautiful time of the year? Personally, it is a tad cold for my ex-Durban blood, but not for the hardened water-loving people of the Western Cape, who take advantage of the pristine early morning rowing conditions and the late afternoon winds for sailing. These water-lovers are missing out on a privilege, if not a right, that has been unceremoniously ripped out from underneath their boats. I'm obviously referring to the travesty that is sewage that has been allowed to pollute our, and a few other bodies of water. I am not going to delve into the causes of this travesty as it has been explored at length below, and in many other forums and platforms.

However, your SRA Committee, along with other individuals in and around our area, have been tireless in the fight in not only trying to stop the cause, but also enforcing the eradication of future spills with a passion that is, to say the least, awe-inspiring. I doff my cap to each and every one of them, thank you!

Once again I am aware of the inability of our security service provider, ProSec, to ensure the adequate maintenance and durability of the patrol bicycles and general equipment for our patrolling guards. With security being my portfolio, I can report that I have addressed this matter at every single meeting and in every conversation that I have had with the management of ProSec. I can go into the myriad of reasons and excuses that have been given, all extremely valid and understandable, but the bottom line is that the bicycle patrol system does not work and we are exploring better systems and more effective and durable modes of transport for our long-suffering guards.

It appears that our toad tunnels are a hit with our amphibian friends and again, a huge thank you to those that care and have the passion and will to carry out the thankless task of ensuring, not only their immediate survival, but also contributing to the saving of an endangered species.

Finally, our AGM is around the corner (16 November 2021) and I look forward to seeing you there. I encourage each and every one of you to attend and participate in ensuring that our destiny is shaped in the manner in which we wish to live by simply being part of a unique community in an even more unique and beautiful part of the Western Cape.

Remember to smile and wave!

Graeme Cann  
Cell 082-338-2839.  
E-mail at [graeme@betsport.co.za](mailto:graeme@betsport.co.za)

## **Zeekoevlei under siege from sewage**

By now most of us are aware of the massive sewage spills into Zeekoevlei that started at the beginning of July and you will have received the comprehensive report from Jenny Day, Chair of the False Bay Nature Reserve Protected Areas Advisory Committee (FBNR PAAC), which was sent out by the SRA on Saturday 14 August 2021 (see Appendix at the end of this newsletter).

Unfortunately, the Vlei remains closed for recreational activities and the weir will be kept open indefinitely so that the nutrient-rich water can be flushed out. Closing the Vlei now would result in algal blooms through summer and increased sedimentation of the vlei basin by decaying algae, which is detrimental to the integrity of the ecosystem over the long-term.

The FBNR PAAC has submitted a proposal to the City for remediation activities to be conducted over a two-year period. Details of this proposal are included in the above mentioned report.

The PAAC will be holding a Special Meeting on Friday 20 August 2021 to update members on the sewage issues; to discuss latest water quality results and implications for weir closure / draw-up; to consider rehabilitation plans as proposed by the City; and to consider improved monitoring of water quality to allow rapid response to sewage spills in future. We will make the Minutes available to Zeekoevlei residents and FoZR members.

Many thanks to all the residents who have bombarded the media, the City of Cape Town officials as well as Western Cape Government with emails, demanding action and resolutions regarding the sewage spills. We are extremely fortunate to live in a neighbourhood where residents care deeply about nature and wildlife, and where we have a number of experts to assist and guide us.

## Friends of Zeekoevlei and Rondevlei (FoZR) news

**Zeekoevlei Outdoor Community Market**  
**Sunday 3 October from 09h30 to 14h30**  
**CTEET, Peninsula Road**

To book a space contact [fozrmarketing@gmail.com](mailto:fozrmarketing@gmail.com).

Keep an eye on <http://www.zeekoevlei.co.za/> for more FoZR news and updates.



### FoZR membership

Friends of Zeekoevlei and Rondevlei  
NEDBANK Account Number: 204 6663 500  
Branch Code: 198765  
Savings account

Please use your full name, surname and address as reference.  
Membership fees are R75 per family and R50 for individual membership.

Contact us on [fozrmarketing@gmail.com](mailto:fozrmarketing@gmail.com) for business membership.

## Welcome to Bongani Zungu



Bongani Zungu has joined False Bay Nature Reserve as the Reserve Manager. He previously worked in Johannesburg on catchment management and has worked for both Cape Nature and South African National Parks. He has a Masters Degree in Environmental Management.

Bongani has jumped in boots and all, starting with his first major crisis – the sewage spills into Zeekoevlei.

I posed some questions to Bongani and here are his answers:

*Are you a fauna or flora guy? And what are your favourite species?*

I'm a fauna (mammal) person. My Masters was on leopard and caracal using camera traps so these are my two favourite species.

*What is your vision for FBNR? What impact do you hope to create?*

My vision for False Bay is two-fold. One is to rejuvenate Strandveldt and to contribute to its protection. This involves a number of projects including veld rejuvenation using large mammals and applying appropriate veld management interventions. The other one is on improving water quality in our water bodies. Projects in mind for this include re-establishment of indigenous fish and initiating a robust water quality management system, in conjunction with local specialists.

*Biggest challenge so far?*

The management of different stakeholders, especially during the sewage spill.

*What do you enjoy doing in your leisure time?* I am a long-distance runner. I spend most of my time on the road running, especially on weekends.

## Platanna Parade



Platanna parade Photo: Neil Major

On Sunday 8 August 2021 we had a platanna parade across Peninsula Road between the guard hut and house no 13. The rain brought out hundreds of common platannas of all sizes and they started slipping and sliding across the road in the direction of Rondevlei. Some eager male western leopard toads tried to catch a ride to the other side. Volunteers jumped into action to assist the frogs across the road to safety and to guide motorists through the froggy festival.

Thank you to all the residents who patiently waited for the road to be cleared and who drove ever so slowly to avoid the platannas. One of the residents commented, "At no 11 we had what felt like hundreds of toads trying to cross over. Unfortunately, our house is built in a way that doesn't allow access so we try to collect them in buckets and carry them across the road".

Thank you so much to the residents and volunteers who stayed out in the rain and cold to assist. It was definitely a night to remember!



*Confused male western leopard toad(top) catching a ride on a platanna (bottom) outside no 3 Peninsula Road. Photo: Dalton Gibbs*

**Froggy fun for kids (see pages 15 to 18 - courtesy of the Two Oceans Aquarium and the City of Cape Town)**

## Our frog friends in Zeekoevlei – Helen Lockhart

Living in Zeekoevlei we are surrounded by wetlands, both permanent and seasonal - and could easily be fooled into thinking we live in 'padda' paradise. I have been fortunate to have seen and/or heard several frog species in the neighbourhood and even in my garden. During the rainy season it is an absolute treat to roll down my window as I drive into Peninsula Road and hear the chorus of frogs as they click and snore away to one another in the seasonal wetlands on either side of the road.

This little haven is one of the last few remaining wetland sites on the Cape Flats. Over 50% of South Africa's wetlands have been destroyed due to bad land management and less than 5% of the special seasonal wetlands found on the Cape Flats remain. Pollution, urban development and encroachment, invading alien vegetation, sewage effluent and storm water runoff, domestic pets, climate change and reduced rainfall, and cars on roads are some of the issues facing our frog friends.

During the winter months we often get to see species that share the breeding pond sites with western leopard toads. These include arum lily frogs, Cape river frogs, clicking stream frogs, Cape sand frogs, and flat cacos. Here is some information about these species.

### Arum lily frog *Hyperolius horstocki*

SIZE: 35-40mm



Photo by Dagny Warmerdam

Arum lily frogs live in wetlands in the southern coastal lowlands and breed in small pans, dams, vleis and even quiet streams.

These pretty, highly camouflaged frogs sometimes shelter in the flowers of arum lilies during the day, tucking their bright orange legs and feet under their bodies. At night they creep out of the flower and down the stem to hunt for insects.

Listen to the call [here](#)

### Cape river frog *Amietia fuscigula*

SIZE: 60-120mm



Photo by Marius Burger

These large frogs are common in the Western Cape and can often be seen sitting next to rivers or on the edges of dams and streams. They will also live happily in garden fishponds.

Cape river frogs will eat any animal that they can overpower. They feed mainly on insects, but also have an appetite for millipedes, crabs, other frogs and even small mice.

Listen to the call [here](#)

### Clicking stream frog

#### *Strongylopus grayii*

SIZE: 35-45mm



Photo by Marius Burger

Clicking stream frogs maybe small, but they have a strong voice! Males can be heard clicking away at night to attract females. Clicking stream frogs are often difficult to identify as they vary so much in colour.

They breed in various places – from vleis and slow-moving streams to brackish pools.

Listen to the call [here](#).

### Cape sand frog

#### *Tomopterna delalandii*

SIZE: 45-50mm



Photo by Marius Burger

Cape sand frogs live close to the coast on edges of freshwater lagoons and vleis. They use hard ridges on their heels to bury themselves in the sand, corkscrewing slowly as they burrow.

At breeding time the chorus of the males calling can be heard from over one hundred metres away! About two to three thousand eggs are laid in the water and the eggs have an unpleasant smell about them!

Listen to the call [here](#)

### Flat caco (Flat dainty frog)

#### *Cacosternum platys*

SIZE: Grows to 22mm



Photo by Luke Verburgt

These little frogs only live in the Western Cape in flooded grasslands and seepages, even down at sea level. They have narrow heads, wide bodies and like other species of frogs, their colouration varies from grey to brown to green with dark spots and stripes. Sometimes they have a pale vertebral line running down the length of their bodies and a dark band from their eyes to the base of their arms. Male flat cacos have darker throats.

Listen to the call [here](#)

### Common platanna (African clawed toad)

#### *Xenopus laevis*

SIZE: 60-100mm



Photo by Louis du Preez

These “flat frogs” live in natural water-bodies, but you might see them in your garden pond. They also don’t mind living in the local sewerage works. At the end of the rainy season, they bury themselves into wet mud where they hibernate until the next rains. The common platanna was used in pregnancy tests all over the world between 1930 and 1950.

Listen to the call [here](#)

Also known as African clawed toads, these “flat frogs” have powerful back legs and sharp claws on three of their toes. They hold prey in their mouths and tear it with an overhead “kick” by their back legs.

Common platannas feed in the water on any living creatures they can overpower. Their prey includes frogs and tadpoles (including their own kind), insects and other invertebrates (mosquito larvae especially are consumed by young frogs), small fishes, young birds and mice that fall into the water. They even feed on carrion in the water.

(adapted from <https://www.aquarium.co.za/blog/entry/the-western-leopard-toad-and-other-frog-species-of-cape-town>)

## Local is lekker!

**Local Zeekoevlei  
Resident Handyman  
Kevin Winder  
0832275919**  
**Reasonable rates, trustworthy  
and contactable references**  
**call today for no fuss,  
friendly and reliable service**

There has never been a more important or better time than now to support local businesses. In the best of times we should always try and support our local businesses, but with the economic havoc of Covid-19 and the lockdown, many of these businesses are struggling and livelihoods are at stake.

We have quite a number of small hyper-local businesses based right here in Zeekoevlei - if you offer any services which the community can make use of, be it plumbing, electrical, DIY, computer support, etc. please let me know on [helen.lockhart@aquarium.co.za](mailto:helen.lockhart@aquarium.co.za).



**Rochelle's Kitchen** - Home-cooked meals and catering. Rochelle sends out a weekly menu to choose from and delivers delicious meals directly to you.

Tel: 072 348 7223 or Email: [rochellepascucci@gmail.com](mailto:rochellepascucci@gmail.com)

## Natural sightings

Here are some images shared by Vleibours on the Zeekoevlei Leopard Toad Whatsapp group. Should you wish to join the Whatsapp Group, please message your details - name and tel number to Dagny Warmerdam on 083 741 5787. Dagny is the Endangered Western Leopard toad Conservation Committee representative for the Greater Zeekoevlei and Rondevlei areas. Readers can also send any images of local flora and fauna to [helen.lockhart@aquarium.co.za](mailto:helen.lockhart@aquarium.co.za).

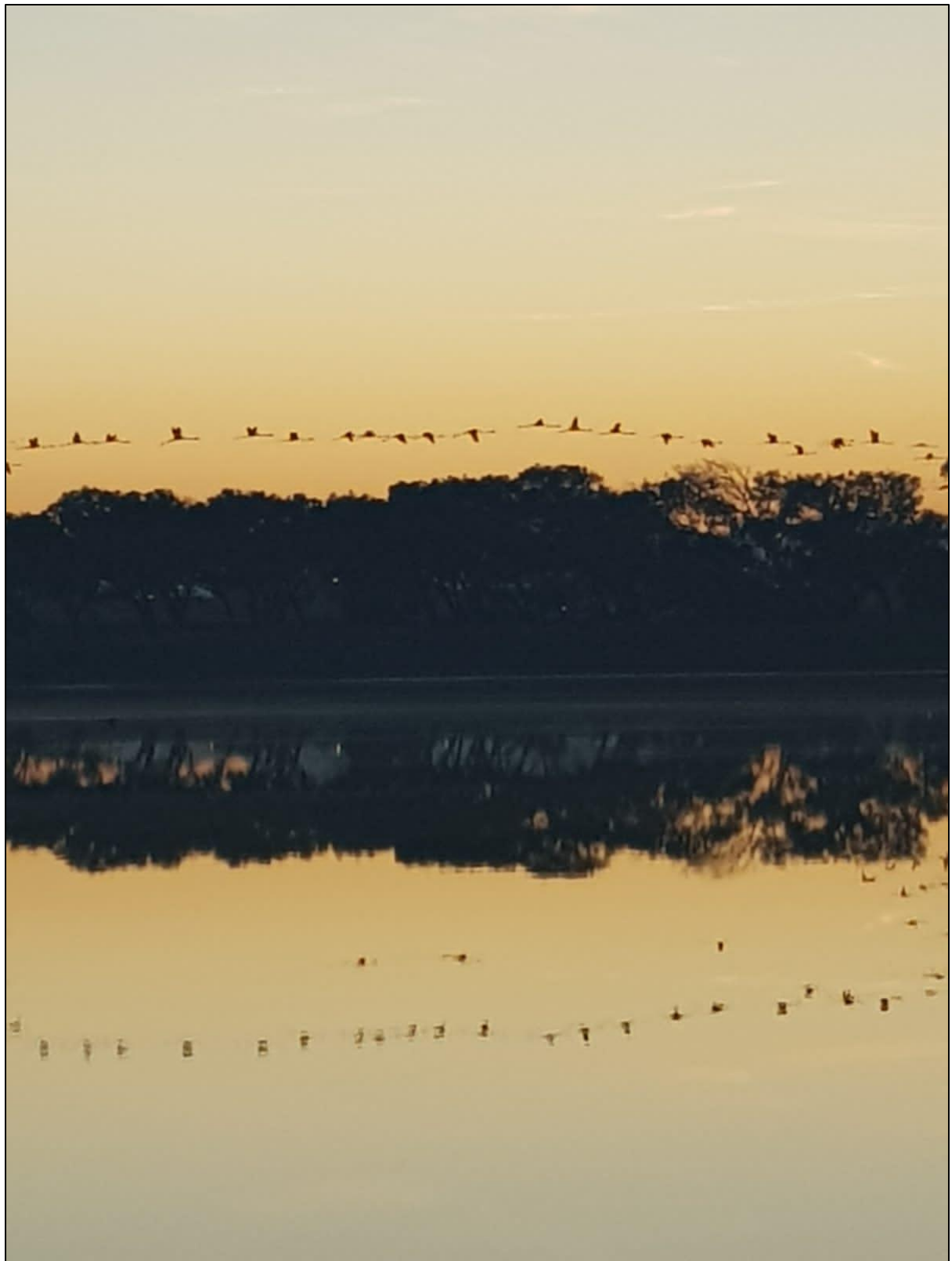
Thank you to Dalton Gibbs and Asieff Khan for patiently answering all the questions about sightings and for identifying many of them.



*I love Van Bloem in the morning. Photo: Nikki Warmerdam*



*Five spoonbills in front of UCT sailing club! Photo: Graeme Cann*



*Dawn reflections. Photo: Graeme Cann*



*Van Bloem in the mornings. A dragonfly frozen in time. Photo: Nikki Warmerdam*



*Moonrise in pink. Photo: Simon Cranswick*



*From "Stormy Bay". Photo: Barbara Rickard*



*My visitor today. Photo: Helen Lockhart*



*Black sparrow hawk feeding in our garden. Photo: Wadeegh Hendricks*



# FROGS AND TOADS ARE AMPHIBIANS.

Some frogs and toads live on land and in the water. Others live only on land.

They are cold-blooded like snakes and lizards (which are reptiles).



Frogs and toads have sensitive skin through which they absorb water and oxygen. This means:

- they have to keep their skin moist so that oxygen can pass through it, otherwise they suffocate.
- they can stay underwater for a long time without having to come to the surface to breathe. Platannas can stay under water for up to an hour.

How long can you hold your breath underwater?

Would you like to swim in water full of poisons? Would you like to drink dirty water? Because of their sensitive skins, frogs and toads like clean water and air. If there are no frogs or toads in the water, it is not safe for you to drink or swim in that water.

## Frog adaptations:

- Frogs have long legs and can leap up to twenty times their body length. A South African frog named Santjie holds the world-record for the **longest jump: 10,22m.**



How far can you jump?



Some frogs have webbed feet to help them swim.



Others have sticky suction pads on their toes so that they can cling to plants.



Some toads have 'claws' to help them dig holes in the sand.

- Some frogs have long, sticky tongues to catch their prey. It takes less than a second for the frog to shoot its tongue out, catch its prey and bring it into its mouth!
- Frogs and toads can move their eyes in all directions without having to move their heads. Do you know of other animals that can also do this? (Seahorses and chameleons).

## What is the difference between frogs and toads?



Guttural toad

Toads have dry, warty skin and short back legs for walking rather than jumping. The warty bumps on a toad's skin helps to camouflage it so that it can hide from predators, which might want to eat it.



Painted reed frog

Frogs tend to have smooth, moist skin and longer legs for jumping.

## Can I get warts from touching a frog or toad?

Some people believe that you get warts from touching frogs and toads, but this is not true because warts are caused by a virus. Some people are allergic to certain kinds of toads and develop wart-like rashes after touching them.

## The big and the small



The **Micro Frog** is the smallest frog in the Western Cape and only grows to 16mm in size. It is critically endangered.

The **Western Leopard Toad** is the biggest toad in Western Cape and grows to 140mm. It is endangered.



How much bigger is the Western Leopard toad than the micro frog?

## TADPOLES - fish or frogs?

see how they wriggle their tails like fish!



Tadpoles are fun to watch in a pond or stream. Tadpoles have gills like fish, but when they become adult frogs, they lose their gills and develop lungs. They also grow legs so that they can swim or walk and jump on land. It's best for tadpoles to stay in ponds and streams - that way they have the best chance of growing into adult frogs.

## Why are frogs important for humans?

- They provide us with medicine, for example anti-biotics and pain-killers.
- They warn us when there is pollution in our water and air.
- They eat insects like mosquitoes so they protect us from malaria.
- They are beautiful!



## Cape River frog

*Amietia fuscigula*  
Size: 60-120mm

I have strong powerful legs for swimming and my feet are webbed almost to the tip of my longest toe.

These large frogs are common in the Western Cape and can often be seen sitting next to rivers or on the edges of dams and streams. You might even find one in your garden, especially if you have a fish pond. Cape River Frogs eat mainly insects, but also have an appetite for millipedes, crabs, other frogs and even small mice!

this is my actual size!  
I bury myself in the mud when the wetland dries up.



I've spotted this frog

When:

Where:

Field notes:

I am the biggest frog in southern Africa!



I've spotted this frog

When:

Where:

Field notes:

this is not my actual size!

## Giant Bullfrog

*Pyxicephalus adspersus*  
Size: 110-200mm

Giant Bullfrogs bury themselves underground during the dry season and fall into a deep sleep. To stop their skins from drying out, they protect themselves in a cocoon - a bit like a specially-designed sleeping bag! They are also able to store water in their bodies. Giant Bullfrogs 'wake up' again when the rainy season starts. Do not try and pick up a Giant Bullfrog if you find one - Giant Bullfrogs have teeth and can give you a nasty bite.

## Raucous Toad

*Amietophrynus rangeri*  
Size: Up to 100mm

Raucous Toads are found all over South Africa except in the Northern Cape. They live in natural vegetation and grasslands on farms. They breed in farm dams, large ponds and in slow-flowing rivers. Raucous Toads tend to stick to the same breeding site every year although they have been known to travel up to 5km between sites!

Actual size



I've spotted this frog

When:

Where:

Field notes:

I am a noisy toad - I sound like a duck when I croak!

## Western Leopard toad

*Amietophrynus pantherinus*  
Size: Up to 140mm

Male Western Leopard Toads start calling in early spring - their call sounds just like loud snoring! When you hear them calling you will know that they are about to start moving towards water where they mate and lay their eggs.

Many Western Leopard Toads are killed during the breeding season as they have to negotiate garden walls, pavements and roads in order to get to their breeding sites. If you see a toad on the road, pick it up and put it on the other side of the road (in the same direction in which it was going).

this is my actual size!

Did you know that I'm also called the snoring toad?



I've spotted this frog

When:

Where:

Field notes:

## Arum Lily frog

*Hyperolius horstocki*  
Size: 35-40mm

Arum Lily Frogs shelter in the flowers of arum lilies during the day. They use the pollen of the flowers to camouflage themselves. At night they creep out of the flowers and down the stems to hunt for insects. They are threatened because people keep picking arum lily flowers.

These pretty frogs breed in small pans, dams, vleis and even quiet streams. Please don't pick arum lily flowers or buy them from the road side - you might end up taking a frog home with you!

If you look very carefully you might find me hiding in arum lily flowers.

this is my actual size!



I've spotted this frog

When:

Where:

Field notes:

## Table Mountain Ghost frog

*Heleophrynus rosei*  
Size: 45-60mm

These critically endangered frogs live only in streams on Table Mountain. Tadpoles have large sucker-like mouths with teeth which they use to pull themselves over rocks in fast-flowing streams. Adults have sticky pads on their fingers so that they can climb over slippery rocks.

Because humans are using (and wasting) more and more water, the mountain streams no longer flow all year round. This means that these frogs have fewer places to breed.

Very few people have ever seen me - that's why I'm called a ghost frog!

Actual size



I've spotted this frog

When:

Where:

Field notes:

**WETLANDS!**  
HOP, HOP, HOORAY!  
**finish**

**start**  
**Garden Home**

**watch out!**  
Herons like to eat frogs!  
Miss a turn

**watch out!**  
Speeding cars kill frogs!  
Move back 8 spaces

**watch out!**  
BULLDOZER ALERT  
Move back 2 spaces

**watch out!**  
Frogs Drown in swimming Pools

**watch out!**  
Cats are a threat to frogs!

**watch out!**  
Down the Drain you go!!

**watch out!**  
Alien vegetation!  
Go back 1 space

**Two Oceans AQUARIUM**  
CAPE TOWN SOUTH AFRICA

- you can either play the game with DICE, or solve the sums along the way to move forward  
- to start the game, move the number of blocks equal to the number of letters in your name  
- play the game whenever you see... use a pebble or a sea shell (or anything from nature) to mark your place in the game.

**HAPPY HOPPERS**

Help the western Leopard Toad move from his garden home to the wetland



(Content on pgs 15 to 18 - Courtesy of the Two Oceans Aquarium and the City of Cape Town).

## **APPENDIX**

### **Information on the recent sewage leaks into Zeekoevlei and subsequent developments**

#### **Extract from a letter from the PAAC to the Mayor, 16<sup>th</sup> July 2021**

Over the past two weeks, Zeekoevlei and its associated wetlands have been subjected to an unprecedented inflow of sewage, as outlined below.

- 4-9<sup>th</sup> July: A major inflow of untreated sewage into the vlei, affecting critically endangered seasonal wetlands, the vlei, and public facilities such as braai, toilet, picnic and fishing facilities along the eastern shore (all flooded by sewage) as well as resulting in closure of the vlei to recreational users. Sewage inflows over this time were coarsely estimated as some 15 – 20 million litres (15 000 to 20 000 cubic metres) per day and amounting to over 100 million litres over the 6 day period. This spill was identified and reported by False Bay Nature Reserve (FBNR) staff – but the response from the City's waste management teams was belated (City officials met on site only on 8 July) and ongoing monitoring and attendance of the inflows was carried out primarily by FBNR staff and representatives of the non-profit organisation "Friends of Zeekoevlei and Rondevlei" (FOZR);
- 9 July 2021: An additional spill identified by FOZR near to the WWTW – and a temporary repair carried out;
- 12 July 2021 – pump failure at the WWTW resulted in failure of the last working screw at the Waste Water Treatment Works (WWTW). [These screws move raw sewage into the works, and the failure of the last working one resulted in back-up of all sewage entering the WWTW, resulting in progressive haemorrhaging of at least six manholes upstream, and probably more throughout the WWTW catchment, which in turn resulted in mass overflow of untreated sewage directly into Zeekoevlei and its associated wetlands, as well as other wetlands such as Rondevlei.] An estimated 105 million litres of raw sewage entered Zeekoevlei over the 24 hour period – this is approximately 10% of the total volume of Zeekoevlei when full.

#### **ATTEMPTS TO MITIGATE AGAINST THE EFFECTS OF THE SEWAGE LEAKS**

The following approaches have been used to try to stem the sewage flows into Zeekoevlei and its wetlands:

- Bioremediation attempts – bio enzymes to address bacteria in raw sewage were applied. Such approaches have limited value, as they are designed for small, localised sewage spills and are unsuited to the scale of the events outlined above, which require a sewage treatment works to contain and treat the pollution source. Such interventions moreover do not address the impact of nutrient inflows into the water body;

- Diversion of sewage flows into the cut-off drain – this drain was constructed to divert leachate from the WWTW settlement ponds, and pass it into the Zeekoe Canal and thence into False Bay. The diversion canal was filled beyond capacity during the event of 12 July;
- Installation of a new gearbox at the WWTW on the afternoon of 13 July;
- Sewage flows from most of the manholes has stopped but the pressure is too great to stop it completely. The extent to which other water bodies (e.g. Rondevlei) that are linked to stormwater systems now in receipt of untreated sewage flows is not known.

Alternative approaches such as the emergency diversion of sewage to adjacent artificial pans in the WWTW were thwarted out of concerns for end-users of treated irrigation water (Steenberg Golf Course) and legal issues (whether the National Environmental Management Act (NEMA) or the National Water Act (NWA) would be triggered by such interventions).

## **WAY FORWARD**

We would like a firm commitment from the City, including time frames of no longer than two years, for completion of the following necessary remediation measures.

1. Immediate repair of the existing intake systems at the WWTW so that the system is not reliant on a single working screw only but has adequate back-up such that even with failure of one screw, there are at all times more than one operational screw in place;
2. Preparation of an Action Plan to guide swift interventions in the event of future sewage spills into the vlei, including agreement as to suitable areas for the temporary diversion of sewage flows to avoid sensitive areas including Zeekoevlei;
3. Investigation of the extent to which other water bodies of ecological and/or recreational importance (e.g. Rondevlei, Princessvlei and Sunrise Beach) have been negatively impacted by inflows of nutrient-enriched polluted water as a result of the most recent incident;
4. Preparation of a rehabilitation plan to allow for the rehabilitation of seasonal wetlands, terrestrial areas and reedbeds on the vlei margins that have been contaminated with sewage waste. This plan would need to address:
  - a. Plant propagation;
  - b. Removal and disposal of contaminated soils;
  - c. Shaping and re-establishment of habitat
  - d. Maintenance during the establishment phase;
5. the best time of year for undertaking the above activities and a time-frame for rehabilitation.

6. Implementation of the above rehabilitation plan within no more than one calendar year from receipt of this letter, excluding establishment phase maintenance;
7. Commencement of dredging of accumulated organic sludges from the vlei in terms of an approved dredging plan, but focusing initially on the areas where sludge is most concentrated. This would require ...
  - a. A survey of the bottom of the vlei to identify the location and extent of the most concentrated sludge basins;
  - b. Removal of these sludges by:
    - i. Dredging a channel or channels from these towards the weir;
    - OR (where the above is inappropriate or unfeasible)
    - ii. Allow for direct dredging of sludge from these areas, and its disposal by pipe to areas identified in the EIA;
  - c. Modification of the weir outlet to allow deeper draw-down from the vlei;
  - d. Development of a drawdown protocol to guide ongoing vlei management;
  - e. Ensuring that the above activities can be accommodated in an amendment to the existing Environmental Authorisation.

#### **UPDATE AS OF 12.08.2021**

The leaks were repaired soon after this and the damaged pumps replaced so that sewage could be pumped into the works. Currently we have been told that two of the four Archimedes screws that perform this function are operational. There seems to have been more than one sewage spill. A "geyser" of sewage was noticed to the west of the maturation ponds but this turned out to be matter of vandalism and the damage was soon repaired. Sewage is still being discharged into the Big Lotus River, however.

As Chair of the PAAC I wrote to the the Mayor, Cllr Gordon, Ald Xanthea Limberg and the City Manager on 23.07.21 requesting relevant water quality data from the City. Not one of them has yet replied to me, despite several requests. It was only when we submitted a formal request for access to the data through the PAAIA legislation (Promotion of Access to Information Act, which forces the City to provide the data) that the results were sent.

So – we now have the results but only for a few sites, and only up to 27<sup>th</sup> July. This is not satisfactory but we can at least confirm that all of the tested sites from within the Lotus River and Zeekoevlei have been seriously contaminated by sewage, on a seemingly ongoing basis, by different sources. The numbers of test organism, *E. coli*, are reducing but on 27<sup>th</sup> July (the latest data) were still far above safe levels for semi-contact sports.

Moreover, the medium to long term impacts of allowing the accumulation of nutrients associated with sewage inflows could be severe, resulting in ongoing algal blooms through summer and increased sedimentation of the vlei basin by decaying algae. Thus keeping the weir open for now and allowing nutrient enriched flows to pass through seems a good plan.

## **AND NOW?**

The City is actively considering how to address our request for remedial actions as listed in the letter above. We will let you know what they plan to do.

A small group of us are drawing up a proposal for an improved monitoring plan that will alert the Nature Reserve staff of spills or potential spills and that will provide better information on the exact location of the spill.

The vlei will remain closed for some time, at least until the levels of *E. coli* indicate that the water is safe for “intermediate contact” sports such as sailing and rowing. Once the sources of sewage inflows have been addressed, *E. coli* levels will drop naturally. The timing of closing of the weir will also be considered with regard to the quality of inflowing water, and clearly this is also an aspect that will dictate when the vlei will be open for recreational use.

We owe a huge debt of gratitude to a number of people who have gone out of their way to try to deal with the sewage spills: Tom Schwerdfeger and Sidney Jacobs of FoZR; Dalton Gibbs and Bongani Zungu (our new Reserve Manager) of the False Bay Nature Reserve; Abdulla Parker of the City's Catchment Management division; and Liz Day of Liz Day Consulting, all of whom have put a great deal of time and effort in trying to reduce the effects of these spills.

Jenny Day

Chair

False Bay Nature Reserve Protected Areas Advisory Committee

12.08.2021