

## VOGELGAT NATURE RESERVE NEWS - August 2016

### News from the Bridge

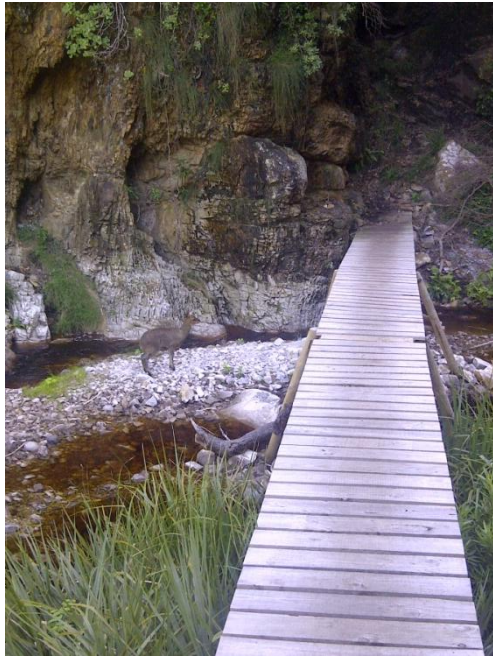


People in general are always looking at the “big 5”. Well whilst having breakfast at Leopard Camp this Cape crag lizard (*Pseudocordylus microlepidotus*) emerged from the rocks and began to sun himself. His stare tells you everything...do not try to catch him as it holds on like a bulldog and it is rather painful...although lovely to photograph! You would be surprised what you see when you sit still and just enjoy the vistas.

As most “fair weather” hikers usually stay away from the mountains in winter, just like the hibernating reptiles. Well if you equip yourself with warm gear the mountains are full of adventures...the gurgling sound of the streams just after the rains, frogs chirping and Giant proteas open to the wintery rays. The clear skies are a marvel for star gazers and full moon lovers. The early mornings...the orange glow of sun rise, with the clouds below you.



We have many requests when we post photographs on our face book page...”where did you take those?” if you want to see natural wonders you have to get yourself into nature. Get up early, sit quietly, and know your animals and seasons i.e. fire flies emerge late October etc. I encourage you all to make the effort to explore our hidden gems. Below are 2 photographs. One of a klipspringer at Colenema Bridge – a 10 minute hike towards the waterfall. The other photograph is of fresh leopard tracks taken by one of our members.



## Research

We have had a number of Universities visit us in the past year. Ross Turner is completing his PhD on Ericas. Professor Muthama Muasya of UCT continuing very interesting work on Indigofera. Canadian post doctorate, Tammy Elliot - *Tetraria cuspidata* species complex. Dr Braam Van Wyk is working on the difference between the *Olea capensis* species (Iron wood). There seems to be a very distinct difference between those that grown along the coast and those that grow in the kloof.

## Beacon hut revamped

After nearly 17 years Beacon Hut needed a revamp (below left). The whole cabin was gutted, beds, kitchen and the full front wall removed. We also extended the cabin by 80cm to give some more space. Peter Vermaak, a local electrician has kindly donated solar equipment for us to discard smelly paraffin lamps and dangerous candles. All the extensions were of full wooden glass doors which allow for 180 degree sweeping views, from Caledon to Hermanus. You can now lie in your bed at 800 meters with these breath taking views!





Anyone for a cuppa tea? Stay a while.....rejuvenate your spirit.

### **Plant intelligence**

In 1973, a book claiming that plants were sentient beings that feel emotions, prefer classical music to rock and roll, and can respond to the unspoken thoughts of humans hundreds of miles away landed on the New York *Times* best-seller list for nonfiction. “The Secret Life of Plants,” by Peter Tompkins and Christopher Bird.

Hence the need for plant neurobiology, a new field “aimed at understanding how plants perceive their circumstances and respond to environmental input in an integrated fashion.”

Many plant scientists have pushed back hard against the nascent field, beginning with a tart, dismissive letter in response to the Brenner manifesto, signed by thirty-six prominent plant scientists (Alpi et al., in the literature) and published in *Trends in Plant Science*. “We begin by stating simply that there is no evidence for structures such as neurons, synapses or a brain in plants,”

Since plants can’t run away and frequently get eaten, it serves them well not to have any irreplaceable organs. “A plant has a modular design, so it can lose up to ninety per cent of its body without being killed,” he said. “There’s nothing like that in the animal world. It creates a resilience.”

A recent study in *Science* found that the caffeine produced by many plants may function not only as a defense chemical, as had previously been thought, but in some cases as a psychoactive drug in their nectar. The caffeine encourages bees to remember a particular plant and return to it, making them more faithful and effective pollinators.



Perhaps the cleverest instance of plant signaling involves two insect species, the first in the role of pest and the second as its exterminator. Several species, including corn and lima beans, emit a chemical distress call when attacked by caterpillars. Parasitic wasps some distance away lock in on that scent, follow it to the afflicted plant, and proceed to slowly destroy the caterpillars. Scientists call these insects “plant bodyguards.”

Mancuso showed a slide depicting how trees in a forest organize themselves into far-flung networks, using the underground web of mycorrhizal fungi which connects their roots to exchange information and even goods. Radioactive carbon had been routed from tree to tree. Every tree in a plot thirty meters square was connected to the network; the oldest trees functioned as hubs, some with as many as forty-seven connections. The diagram of the forest network resembled an airline route map.

To say that higher competences such as intelligence, learning, and memory “mean nothing in the absence of brains” is, in Dennett’s view, “cerebrocentric.”

“Why would a plant care about Mozart?” the late ethnobotanist Tim Plowman would reply when asked about the wonders catalogued in “The Secret Life of Plants.” “And even if it did, why should that impress us? They can eat light, isn’t that enough?” .....

<http://michaelpollan.com/articles-archive/the-intelligent-plant/>  
[https://www.ted.com/talks/stefano\\_mancuso\\_the\\_roots\\_of\\_plant\\_intelligence?language=en](https://www.ted.com/talks/stefano_mancuso_the_roots_of_plant_intelligence?language=en)

CHAMOVITZ, D. 2012. *What a Plant Knows: A Field Guide to the Senses*. Scientific American, New York.

TREWAVAS, A. 2014. *Plant Behaviour and intelligence*. Oxford University Press, Oxford.

KARBAN, R. 2015. *Plant Sensing & Communication*. University of Chicago Press, Chicago.

MANCUSO, S. & VIOLA, A. 2015. *Brilliant Green: The Surprising History and Science of Plant Intelligence*. Island Press, Washington DC.

## **By-Pass Road**

We at Vogelgat believe that R230 Million to be spent on a relief road, cutting huge swathes into Fernkloof Nature Reserve on a rant of traffic being 7 percent is outrageous. Cape Nature is not supportive of the proposed relief road. There are alternatives as short routes to Bredasdorp via Caledon and public transport is envisaged. The Cape Floral kingdom is the smallest Biome in the world, yet houses the highest species abundance. So let us do our best in protecting these small vestiges of nature.

## **Automatic weather station**

We have recently re-installed our weather station which measures rainfall, temperature, wind speed and direction. If you require any information that may help you in conservation/ nature related matters or for insurance purposes please contact us. We are indebted to CSAfrica (Stellenbosch) for giving us a huge discount and support. Many thanks goes to local laptop specialist John McKinnell for all his expertise in installation.

## **Bring n Braai**

Do not forget the members Brunch at Vogelgat on the **16<sup>th</sup> of December at 11h00.**

**NNB! Please remember to pay your annual fees they are due now.**

Vogelgat Nature Reserve **R2 250.00**

Maanschynkop **R300.00**. A total of **R2 550** for both reserves.

Do note that **Leopard Camp R80 per person per night.**

Bank – Standard Bank – Hermanus

Branch Code 05031200

Acc No. 082268053

NNB reference your surname + Initials. Thank you.

Buysehuis **R 450** per night for the whole chalet including bedding and towels. Sleeps 4  
White House **R330** per night for the whole chalet including bedding and towels. Sleeps 2 plus futon.



**Figure 1**Black Harrier close to Leopard Camp!