## Botfriends newsletter August 2019



### WHERE **DID** THOSE PLANTS GO?

Africa's biodiversity hotspots have been confirmed extinct. In a scientific study published in the journal *Current Biology*, botanists raised alarm over the shocking rate of plant extinctions in the country.

There are 36 biodiversity hotspots around the globe, areas that have extremely high, unique plant species. Most of these species are endemic, which means they're not found anywhere else in the world.

South Africa has three biodiversity hotspots; the Cape Floristic Region, the Succulent Karoo, and the Maputuland-Pondoland-Albany corridor.

Principal study author, Professor Jaco Le Roux says 79 plants in South Africa's three biodiversity hotspots are extinct. Le Roux, who is affiliated with the Centre for Invasion Biology at Stellenbosch University, says at 49.4%, agriculture tops the list as the main driver for indigenous plant extinction in the country.

Urbanisation accounts for 38% and invasive plant species 22%. Louw explains more should be done at government level to conserve the country's biodiversity.

Experts predict in the areas they studied, an additional 21 plant species will go extinct by 2030, 47 species by 2050 and 110 species by 2100.

[reported by Kevin Brandt EWN 24 August]

Going to do recycling at Walker Bay Recycling and have some room in your vehicle? Tell your neighbour or post on Whats App and take someone else's recycling along too - it will save some fuel as well.

# Another challenge and another kind contribution from concerned citizens

Daphne and I would like to repeat the challenge to donate to Bot Friends for the control of alien weeds in Fisherhaven. Our first challenge raised R8050 and this was used to good effect – but weed control needs some follow-up as there is still a massive seed bank. The earlier the seedlings are removed, the cheaper and more effective it is, then we can minimise this threat to our neighbourhood. So we have again deposited another R2000 to the Botfriends account and will be really appreciative of others who can contribute. We find it amazing that we can walk from the slipway to the Afdaks and barely see a Rooikrans or Port Jackson seedling.

Daphne and Bruce Bayer

Are you going to take up the challenge? The more that is contributed, the cleaner and safer our surroundings will be.

Our bank details: Friends of the Bot River Estuary and Environs Standard Bank 185565549 Branch 050312. PLEASE use your name and address as reference. Cash payments: Contact botvlei@gmail.com.

#### How does your garden grow?

Alien species such as Port Jackson, Australian Myrtle, pine and gum trees need to be cleared from all public and private land in term of the environmental laws of the country. The main gains are:

- a great increase in water availabilityaliens use as much as five times the water that indigenous species use
- dramatic reductions in fire risk: risks are reduced by as much as ten times compared to indigenous species
- an increase in biodiversity with all its associated benefits: over four hundred indigenous species offer a much more stable and sustainable environment than an environment dominated by a few invasive species

The most important objectives of the correct clearing of alien species are

- solving the problem by the correct management, rather than making it worse with incorrect management
- very reduced costs of clearing if the vegetation is dominated by indigenous species
- reduced costs of future fire control and risk of fire damage to infrastructure

The major problem is the spread of alien species into new areas and the increase in density of areas already partly invaded. A proper understanding of the invasive species and the indigenous species is required to put forward a management strategy that can solve the problem in the longer term almost permanently, rather than a disaster management strategy which looks good in the short term, but makes the problem worse in the medium or long term.

The cutting, mowing or slashing of alien plants is ineffective. Removal of the roots is necessary with as little disturbance to the soil as possible. Then growth of seedlings is the only problem to be dealt with in the future. This is much cheaper; also, good competition from indigenous plants allows nature to help do half the job for you. Poisons are forever. They do not break down and accumulate in the soil, so should only be used when absolutely necessary: as little as possible and hopefully only once.

Chopped-down aliens are best used as a mulch, especially on bare areas. They return nutrients to the soil, provide a good seedbed for the growth of seedlings and reduce wind erosion. The timing of seedling removal is critical. Remove alien seedlings when they are small: it's cheaper and allows indigenous seedlings to grow. Do not allow aliens to grow to the point that they start to flower and produce more seed. It will reduce immediate costs but increases overall costs dramatically.

It is quite possible to eliminate invasives from our environment when applying the right techniques. If you are unsure about what to do, you can contact Botfriends at botvlei@gmail.com or Whats App Michael 0832610543.

Michael Austin

## animal kingdom

We would love to hear from those readers who have information and insight about the wild fauna in the Bot River estuary and environs.



If you are in the know, let us know: botvlei@gmail.com.