

Dear Sir / Madam

We wish to make the following comments regarding the CoCT's draft "Urban Forest Policy".

1. We recognise the importance of trees and support the initiative, but the policy should be clear about planting the right trees in the right place, and that the policy needs to be placed in the broader context of conservation and safety needs in Cape Town.
2. The policy does not address the requirements of the **Alien and Invasive Species Regulations** (2014, and as amended in 2020) of the National Environmental Management: Biodiversity Act (Act 10 of 2004). Whilst it does make reference to the Conservation of Agricultural Resources Act (Act 43 of 1983), and by implication its Regulations, the AIS Regulations take precedence over the CARA Regulations, being the most-recently published. This must be rectified.
3. Contrary to saying that Category 1 listed invasive species under CARA must be controlled, it should say that listed invasive species under the AIS Regulations of NEM:BA must be controlled (i.e. removed/killed).
  - 3.1 Category 1a species must be controlled.
  - 3.2 Category 1b species must be controlled.
  - 3.3 Category 2 species are automatically Category 1b species where no Permit has been issued, and must be controlled. (We understand that the City has not applied to DFFE for a Permit for any Category 2 species.)
  - 3.4 Category 3 species must be controlled in riparian areas, and – along with Category 1a and 1b species – may not be propagated or planted.
4. It must further be specified that this relates not only to the planting of new specimens of plants, but also to the removal of existing listed invasive species.
  - 4.1 There has been an unfortunate misinterpretation of the AIS Regulations, where the CoCT has claimed that Category 1b, 2 and 3 species are "exempted", and need not be controlled. This is an incorrect reading of the AIS Regulations and Notices, and the CoCT is obliged to adhere to the AIS Regulations by removing these species, as specified.
  - 4.2 This interpretation – and refusal to remove Category 1b specimens – has led to DFFE having to issue written notices to the CoCT. This is something that should not have to happen.
  - 4.3 It would behove the City to recognize that species will only be listed as invasive in the AIS Regulations after a conclusive assessment. There are species that may well become invasive (including because of climate change) that have not yet been listed, and ideally the CoCT should liaise with the Biosecurity capacity at SANBI to avoid planting such trees. This may include certain extra-limital indigenous species, which have invasive properties (e.g. the water-berry; Cape honeysuckle). Lesley Henderson's book, ***Invasive Alien Plants in South Africa***, is also a recommended source for all listed plants, as well as some of the potentially invasive plants (see [https://wwfafrika.awsassets.panda.org/downloads/invasive\\_alien\\_plants\\_in\\_south\\_africa.pdf](https://wwfafrika.awsassets.panda.org/downloads/invasive_alien_plants_in_south_africa.pdf))
  - 4.4 The CoCT should recognise the danger of removing trees that are protecting other trees, leading to inability of the remaining trees to withstand strong winds. When some are cleared, and others are left to continue growing, they may be vulnerable to being toppled by strong winds (which will be exacerbated with climate change), with the consequent risks to life, structures and vegetation. This is particularly true of the six listed *Eucalyptus* species, and *Pinus radiata* and *Pinus pinaster*, where some large specimens (those with a circumference of more than 1,256 mm at a height of 1,000 mm) may be retained in urban areas, in terms of the AIS Regulations.
  - 4.5 It is acknowledged that the management of Heritage trees (both indigenous and alien) needs special attention in the policy.
  - 4.6 It would further make sense that the policy focus additionally upon training and capacity building; awareness-raising and signage; threats to vegetation (e.g. for harvesting, bark-stripping); and recommendations for species to be planted on private land.

5. The City of Cape Town is situated within the Cape Floristic Kingdom. There is no mention of fynbos, or the importance of protecting habitat for fynbos types and species. This is especially important as the City has stated in its *Biodiversity Fact Sheet 08: Threatened species* (2011) that the City of Cape Town already has more threatened plant species (306 as of 2011) than any other city on Earth. Part of the controls over what is planted must be to avoid planting inappropriate trees in areas set aside for biodiversity conservation. The debates around the re-planting of pine trees in critical habitat for the Cape Flats Sand Fynbos and Peninsula Granite Fynbos in Cape Town's Tokai Park would be an example, as would be planting trees in urban renosterveld fragments in the suburbs adjacent to Tygerberg Nature Reserve.
6. The policy makes no mention of fire. Vegetation fires (veld fires) are a characteristic of the fynbos area, and it is known that many invasive species, as well as some non-invasive fire-prone species, exacerbate the problems of fire considerably. There are specimens of fire-prone trees that should preferably be removed if in areas that will exacerbate the risks of wild fires. These include various non-invasive species, such as stone pines, palms, cypresses and certain non-listed *Eucalyptus* species, aside from the invasive species that are known to increase the intensity of veld fires.
  - 6.1 Evidence suggests that all of the 80 structures that burned down in the January 2000 fires around Table Mountain had invasive species adjacent to them.
  - 6.2 In March 2015, the fires around Table Mountain burned down eight structures, seven of which had invasive species adjacent to them. It seems likely that the damage would have been greater had it not been for the Ukuvuka Campaign partnership between the national Working for Water programme, the CoCT and SANParks which cleared some 6,000 hectares prior to the fire. The national Working on Fire programme and the CoCT established an integrated fire-management capacity that also proved to be far more effective than what was in place in the 2000 fires.
  - 6.3 The April 2021 fires on Table Mountain, spreading to Rhodes Memorial, UCT and adjacent areas, again suggests that not addressing the risks of fire-prone species on the urban edge led to excessive damage. It also illustrates the risks of palm trees and cypress trees, which (having been easily ignited by showers of embers and fire-balls from especially the stone pines and gums) caused so much damage within UCT and beyond.
  - 6.4 One can also look at the fires in Knysna (2017), George (2018) and elsewhere, to know the importance of addressing these risks. Studies on the Knysna fires found that the amount of biomass consumed was significantly higher in plantations of invasive alien trees, and in fynbos invaded by alien trees, than in uninvaded fynbos, providing support for the contention that invasion by alien trees increases the impact and difficulty of control of wildfires. (See Kraaij, T., Baard, J.A., Arndt, J., Vhengani, L. & van Wilgen, B.W. (2018): *An assessment of climate, weather and fuel factors influencing a large, destructive wildfire in the Knysna region, South Africa*. Fire Ecology 14:4.). See also [https://www.santam.co.za/media/2685028/consolidated-knynsa-fires-report\\_28\\_may\\_final.pdf](https://www.santam.co.za/media/2685028/consolidated-knynsa-fires-report_28_may_final.pdf), which provides a comprehensive overview on risks that should be understood for such a CoCT policy document.
  - 6.5 There remain extraordinary risks from fire, due to inappropriate management of fire-prone species by the CoCT. An example would be the public open space at Silver Tree Gorge in Somerset West – a heavily invaded area susceptible to a fire rushing up the steep gorge, driven by a south-easter wind, and potentially impossible for our fire-fighting capacities to control. A fire in this CoCT-owned land is inevitable at some point, and the likely damage to the adjacent high-value properties along Silverboom Kloof Road and beyond could be hugely expensive for the CoCT's rate-payers, in terms of the provisions of the Regulations of the National Veld and Forest Fire Act (Act 101 of 1998).
  - 6.6 It is essential that the policy document reflects the need to remove fire-prone invasive trees, as well as palm trees and cypress trees, within a 100 metre distance from the urban edge, and other vulnerable areas.
7. The goal of 10% tree cover is incongruous for greater Cape Town. Section 10.1 says, "*The world norm to qualify as an 'urban forest' is 10%. It is therefore imperative to expand the number of trees; and thereby the canopy over (sic)*". This is inappropriate, given the long-term water situation in Cape Town

and the predicted impacts of climate change, where it is again well understood that most large trees require and transpire disproportionate amounts of water. Rather than setting a percentage, the CoCT should rather seek to have appropriate species of trees planted in appropriate areas, and not create a target that may well have negative opportunity costs.

- 7.1 Planting specimens of tree species that are indigenous to the area, and alien trees that are not invasive and can adapt to the local climatic conditions (strong winds, dry summers), is appropriate for street trees, and in certain other transformed areas.
  - 7.2 The impact of invasive trees, such as pines, gums and wattles, is the greatest long-term threat to Cape Town's water security (see Preston I.R., Le Maitre D.C., Blignaut J.N., Louw L. and Palmer G.C. (2018): *Impact of invasive alien plants on water provision in selected catchments*, Water SA, Vol. 44, No. 4), and this impact will be greatly exacerbated by climate change (see <https://theconversation.com/clearing-alien-trees-can-help-reduce-climate-change-impact-on-cape-towns-water-supply-177463>.) For the CoCT to advocate the planting of species of trees that use disproportionate amounts of water, or failing to remove those that are invasive, is clearly at odds with an integrated water management strategy. It should be stressed that the impacts of inappropriate vegetation on wetlands, and on groundwater, are particularly pertinent to Cape Town's challenges regarding both water quantity and water quality.
  - 7.3 In this respect, mature trees are massive investments in water, and every effort must be made to protect appropriate species of trees that are in appropriate areas. The threats of invasive diseases and invertebrates, illegal harvesting, bark-stripping, cutting down trees for views, and other threats, must be countered in partnership with community structures and NGOs.
  - 7.4 There is scope for the City to integrate the kind of insights from Bongani Mnisi's research project to create fynbos "stepping stones" across the Cape Flats to allow for migration of birds that pollinate plants. (See, for example: <https://www.youtube.com/watch?v=G5wngT5r4-Q>; <https://www.timeslive.co.za/news/sci-tech/2017-08-10-cape-birds-get-new-filling-stations/>.)
8. Indeed, what the City needs is a *Vegetation Management Policy*, and not an *Urban Forest Policy*. What is more, this should not simply be a horticultural focus, but one that is underpinned by ecological principles, as befits what is the most biologically diverse city on the planet (see: <https://www.globalcitizen.org/en/content/cape-town-tops-city-nature-challenge/>).
- 8.1 It should be noted that the recognition of the risks posed by the invasive polyphagous shot-hole borer, and its symbiont fungus, is appropriate, and the City should be commended for its efforts in this regard. It is going to be very important to do everything to avoid the costs that are coming. The paper below on the potential economic costs has just been accepted for publication, and the mid-point estimate is R275 Billion across South Africa, most of which will be borne by local authorities in properly disposing of infected trees. If they don't do this, the damage will be more rapid. (See De Wit, M.P., Crookes, D.J., Blignaut, J.N., de Beer, Z.W., Paap, T., Roets, F., van der Merwe, C., van Wilgen, B.W., Richardson, D.M. (2022): *An assessment of the potential economic impacts of the invasive polyphagous shot hole borer (Coleoptera: Curculionidae) in South Africa*. Journal of Economic Entomology (in press).)
  - 8.2 The susceptibility of species of plants to invasive organisms and diseases is most pertinent in a vegetation policy, along with promoting native biological diversity and considering likely climate-change impacts.
  - 8.3 The CoCT's *Invasive Species Programme*, linked to its *Kader Asmal Skills Development Project*, should also be commended for their work in addressing many of the above-mentioned problems.
  - 8.4 Appropriate management of open spaces that contain priority species and under-protected endangered vegetation types is now being focused upon through the City's *Grow, Don't Mow Campaign* by the City's Environmental Management Department, which is a great start towards an integrated Vegetation Management Policy. See: <https://www.capetown.gov.za/Media-and-news/'Grow,%20don't%20mow'%20spring%20flowers%20applications%20now%20open>.

Thank you for this opportunity to comment on the draft "Urban Forest Policy". Please would you acknowledge receipt of this input, and address correspondence to the co-signatories care of Dr Preston on [gpreston@mweb.co.za](mailto:gpreston@mweb.co.za).

Yours sincerely

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