

Friends of Tokai Park Position Statement

Who we are

The Friends of Tokai Park (FOTP) are a WESSA-Affiliated Friends Group and Public Benefit Organization with 242 people subscribed to our mailing list and 2 085 followers on facebook. Therefore we represent a significant portion of the stakeholders who use and care for Tokai Park. We aim to conserve the native flora and fauna at Tokai Park whilst at the same time promoting the recreational use of the park by the greater community. Our aim is underpinned by four pillars: biodiversity, community, heritage, and safety. In 2016 we ran a petition titled: “[Help restore our Critically Endangered Sand Fynbos at Tokai](#)”. This petition had 2894 supporters, the details can be seen in this article [here](#). This demonstrates a significant support for the natural heritage of Tokai Park, which comes from a less vocal part of the community. Due to our main involvement being at Tokai Park, and due to the global biodiversity significance of the area in question (which we demonstrate below), this position statement focusses on Tokai Park hereafter, but many of the points apply to Cecilia as well.



The biodiversity value of Tokai Park and South Africa's international obligations

Tokai Park holds global significance as a biodiversity hotspot. It contains both critically endangered '[Cape Flats Sand Fynbos](#)', as well as critically endangered '[Peninsula Granite Fynbos](#)', and connects the mountains to the lowlands - the only place in Table Mountain National Park (TMNP) that has a corridor for wildlife from mountain fynbos to Sand Fynbos. Both fynbos types are extremely species rich in terms of plants and animals and are also heavily threatened by development. There is less than 14% of Cape Flats Sand Fynbos remaining in the world, and less than 1% conserved. Part of the area remaining that is in good condition is at Tokai Park. There are over 550 species of native plants at Tokai Park alone, in an area of only 600 ha. This makes it one of the richest places on earth in terms of plant life.

Some 147 plant species belonging to Cape Flats Sand Fynbos are currently threatened with extinction. Of these, 26 occur at Tokai Park. There are also two frog species at Tokai that are listed as threatened in the International Union for Conservation of Nature's Red List, including the Western Leopard Toad. According to the Threatened Species Research Unit at the South African National Biodiversity Institute, the number of species threatened with extinction in Cape Town has increased by 36 in the last decade. Several plant species are already extinct, two of which have been reintroduced into the wild at Tokai Park: [Erica verticillata](#) and [Erica turgida](#), and have successfully established.

The latest [Living Planet Report released by the World Wide Fund for Nature \(2020\)](#) found that the wildlife populations monitored globally have declined by about 68% since 1970, mainly due to agriculture, fisheries, mining and other human activities. This is an alarming 10% increase since their report in 2016. South Africa is a signatory to the Rio Convention, as well as the Global Strategy for Plant Conservation, and has proposed to conserve a minimum of 17% of each vegetation type for future generations and slow the pace of plant extinction. Since only 3% of Cape Flats Sand Fynbos remains in good condition, and only 1% is conserved, we have an obligation to protect and restore it. Tokai Park contains a large proportion of the area that has potential to be conserved and therefore provides a perfect opportunity to right some of our environmental wrongs in South Africa. This is the area currently under debate as part of the review of the Tokai Cecilia Management Framework (TCMF).

FOTP Position Statement

The Friends of Tokai Park (FOTP) have a vision for the conservation and restoration of Tokai Park which is compatible both with recreational desires of the people of Cape Town and biodiversity conservation, and does not require compromises at the expense of biodiversity (in terms of minimal viable populations, ecologically viable management areas, etc). In this statement we lay out our vision for Tokai Park, as well as state four issues we wish to raise. We end with one practical request.

Contents	Page
The Friends of Tokai Park Vision for Tokai Park	4
Issue 1: Governance and Policy - The TCMF Review Process and SANParks Mandate, Mission and Management Plan, as well as local and national policy	7
Issue 2: The integrity of the TCMF Review Process	12
Issue 3: Transitional planting is ecologically unviable	13
Issue 4: Dangerous precedents for public opinion to shape conservation during a time of rapid biodiversity decline globally	16
Practical Request	19

The Friends of Tokai Park Vision for Tokai Park

The FOTP vision is of “a park for all”, where “all” includes both human users of Tokai as well as the numerous plants and animals that call Tokai home. We envision Tokai Park continuing to be popular for recreation amongst walkers, joggers, cyclists, dog-walkers and horse-riders alike, whilst not compromising its significant conservation and cultural value. We believe that recreation and conservation are entirely compatible.

We consider Tokai Park to be the “Amazon” of Cape Town, a biodiversity-rich area similarly heavily threatened by development and invasive alien plants. We advocate its conservation for the benefit of future generations. We believe that “all species have inherent value and that extinction is unacceptable”. We support the full restoration of the Cape Flats Sand Fynbos, Peninsula Granite Fynbos and Afrotemperate Forest at Tokai Park, supported by sound ecological principles and robust scientific research. We also support SANParks’ management efforts.

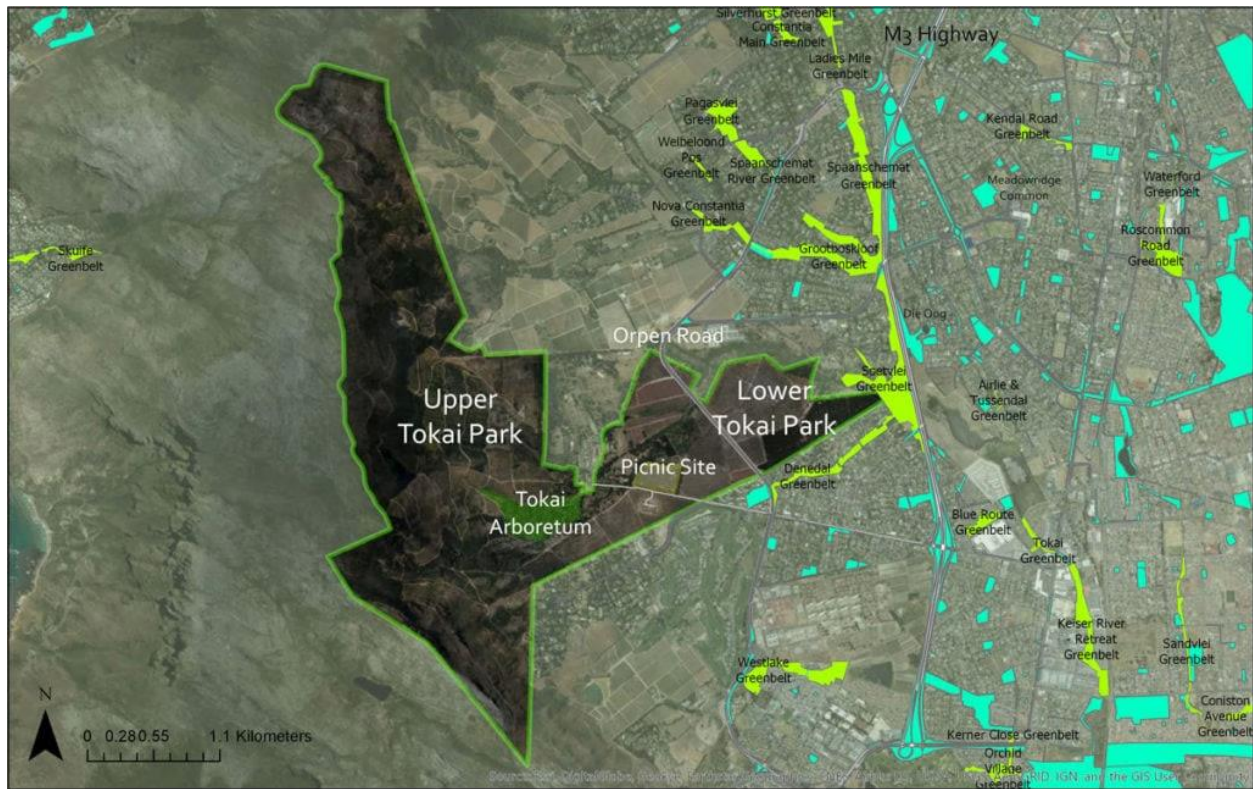
Friends of Tokai Park charts a clear, simple and practicable path to a sustainable future for our critically endangered biodiversity (**Map 1**). Firstly, if people want shaded recreation, we suggest the best place for this is outside the critical biodiversity area of Tokai Park. This should be set aside for conservation in its entirety as a wild, naturally-managed ecosystem such as the rest of TMNP, and not become a garden like Kirstenbosch. This is due to its biodiversity value. Therefore, we recommend that the adjacent extensive greenbelt areas (10 in the area) are planted up with indigenous trees to support shaded recreation, the periphery shaded walks be enhanced, and the establishment of a shaded river ramble walkway Keyser River Green Belt (**1, 2 & 3 on the map**).



Map 1: The Vision of the Friends of Tokai Park for Tokai Park. We focus on three main areas: (a) The Tokai Conservation Area, (b) The Tokai Arboretum and (c) The Adjoining Green Belt Areas.

As proof of our commitment and effort toward this vision, a shaded perimeter walk was planted by the SANParks Honorary Rangers and Friends of Tokai Park. However, water restrictions precipitated by drought precluded the trees being watered and they failed to establish themselves – a sure sign of their species being unsuited to the area. This perimeter walk needs attention and additional trees should be added to it. Therefore a shaded river ramble and the area around the Tokai Pony Club planted with near-native indigenous trees could replace the impractical model of “transition planting”.

Friends of Tokai Park support the ideas of various community members for gardens and playparks but we suggest that there is plenty of suitable municipal land for gardening projects, and that this does not have to be done on prime conservation land. Tokai Park cannot be considered as an island, but must be considered in its context (**Map 2**). There are numerous parks and plots of land in the surrounds that could support the creative community ideas of traditional gardens, remembrance gardens and play parks. This does not have to compete with, or compromise biodiversity conservation. We have indicated some potential locations for these ideas (**4 on the map**), but there are other locations as well.



Map 2: The context of Tokai Park including greenbelts (green) and city parks (aqua).

Declared a National Monument in 1985, the year preceding its Centenary, the Tokai Arboretum contains spectacular stands of Eucalypts and trees from original South African silviculture experiments. In the 1990s, a Gondwana Garden was planted to display plants typical of the Cape 100 million years ago. Friends of Tokai Park envision enhancing these aspects of our cultural heritage. The Arboretum’s roads should be upgraded with good drainage and maintained in good

condition. Footpaths through the Eucalyptium, nursery and amphitheatre should also be maintained. Benches and ablution facilities should be provided and, referring to point 6 above, The Lister's building (previously Lister's Museum, and latterly a tearoom) could be converted into a museum showcasing the Arboretum, which would be more compatible with baboon management than a tearoom (**5 on the map**). This will form part of the Tokai Manor Precinct which will be out for tender when TMNP management move to their new quarters.

The fynbos itself at Tokai Park must undergo regular prescribed ecological burns (approximately every 10 years) in a manner promoting fynbos restoration while keeping local neighbourhoods safe and respecting the rights of adjacent landowners to fire safety. This precludes trees being planted within the fynbos, and renders the notion of transitional planting impossible. In addition, the alien trees should be cleared in a timely and ecologically strategic, integrated manner (**6 on the map**). The Friends of Tokai Park will continue to support SANParks with volunteer efforts in this regard.

In closing, we believe that whatever the community desires (e.g. parks, shaded recreation, gardens) are creative ideas, and possible, but that they do not have to be fulfilled within a core conservation area, but can be accommodated within the vicinity of the park, with a bit of creative, integrated thinking out of the box. This will require SANParks to join hands with the City of Cape Town as well as community members, in order to fulfill our international obligations, our national and regional priorities, as well as satisfy citizens desires.

Issue 1: Governance and Policy - The TCMF Review Process and SANParks Mandate, Mission, Management Plan, local and national policy

Why are the public being given a blank page in terms of submitting their proposals and visions for Tokai Park? At the first engagement meeting (25 May 2021), we were given the impression that all visions and proposals for the park would be considered, and that the future of Tokai is up to the public to decide.

However, SANParks has a core mandate as well as a defined mission:

Core mandate:

The core mandate of SANParks is the conservation of South Africa's biodiversity, landscapes and associated heritage assets, through its system of national parks. SANParks also promotes and manages nature-based tourism and delivers both conservation management and tourism services through a people-centered approach.

Mission:

To develop, protect, expand, manage and promote a system of sustainable national parks that represents natural and cultural heritage assets, through innovation, excellence, responsible tourism and just socio-economic benefit for current and future generations.

SANParks also has a park management plan, which had wide Stakeholder Input and Minister Sign-off. Is the park achieving the park management plan? Will the results of this TCMF review process align with the park management plan?

SANParks mandate and mission, as well as budgetary constraints, the national law, and international obligations needs to be communicated to the public. It should have been the TCMF Facilitators' role to explain and lay out these constraints and considerations, so that the public could chart a way forward within the constraints of the current system. In addition, the biodiversity value of these areas should have been presented by SANParks. The way that the review process was conducted seems to have been based on the premise that every stakeholder is an expert and in full possession of all facts. Or alternatively that facts do not matter at all, only people's opinions. Lack of education around biodiversity loss, and the biodiversity value of the areas in question may well be a significant factor influencing, and therefore undermining, the review process. SANParks has a responsibility to educate and inform the public about the land and biodiversity under their management.

The TCMF review ought to be conducted such that the way forward is compatible with SANParks' mandate, management plan, and within the limits of the law (for example: NEMBA, details to follow). South Africa also has several critical biodiversity policy obligations that cannot be ignored. Here we lay out some of the other critical considerations as part of such a process, which -to date- have been lacking, and need to be fully explained to involved stakeholders going forward. We list the following considerations:

1. The South African Constitution

According to the South African Constitution, everyone has the right –

- (a) To an environment that is not harmful to their health or well-being; and
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The South African constitution clearly supports conservation at Tokai Park for this generation and future generations. It makes no provision for recreational desires of a minority group who have access to many other recreational opportunities.

2. NEMBA (National Environment Management: Biodiversity Act 10 of 2004) alignment

NEMBA

(https://www.environment.gov.za/sites/default/files/gazetted_notices/nemba_ecosystems_g32689gen1477_0.pdf) has gazetted broad principles on how the environment should be managed.

As a first principle, negative environmental impact should be avoided.

- Avoidance is the first step in the mitigation hierarchy. It is the complete mitigation of an impact, by preventing it from happening. It is obviously the most preferred form of mitigation, because it ensures no environmental damage.
- The second step in this hierarchy is minimize. Here, the team recognizes that the environmental impact cannot be completely side-stepped; instead, they take steps to ensure minimal damage is done to the environment.
- Third, is rectify. Rectification of an impact implies that the impact has already happened; what we are doing now is damage control. In a way, rectification allows us to correct the mistake that led to the adverse environmental impact.
- If rectification is not possible, we reduce the extent of the impact through management practices and/or change in our methodology. It is when even reduction is not possible that we go for the final step of the mitigation hierarchy-environmental offset.
- Environmental offset is commonly defined as actions taken outside of the development site to compensate for the impacts in the development site. In effect, this means that the development authorities undertake environment conservation activities to compensate for what they do in order to achieve “no net environment loss”, or more specifically “no net biodiversity loss”.

Therefore a fundamental question in terms of NEMBA would be: if we were to lose the Sand Fynbos to transitional planting, would SANParks be able to apply an offset? If not, then our action is misaligned to NEMBA. Given the degradation of Sand Fynbos, with less than 14% of Cape Flats Sand Fynbos remaining in the world, and less than 1% conserved, there is very little Sand Fynbos available for offsets, and none of it has the biodiversity value of the Sand Fynbos at Tokai Park due to the persisting seedbanks.

In addition, according to NEMBA, there is also a national target to preserve a certain proportion of all vegetation types:

- The thresholds for this criterion are based on the biodiversity targets developed in the National Spatial Biodiversity Assessment (NSBA) 2004. The biodiversity target for a vegetation type is the proportion of the original extent of the vegetation type required to conserve the majority of species associated with that vegetation type. It is expressed either as a percentage of the original extent of the vegetation type or in hectares. Biodiversity targets for national vegetation types range from 16% to 36%, with higher targets for more species rich vegetation types.

Therefore, according to NEMBA, all that remains of Cape Flats Sand Fynbos (only 14%), needs to be preserved.

3. Table Mountain National Park as a World Heritage Site (WHS)

Table Mountain National Park was inscribed in 2004 as part of the UNESCO serial Cape Floral Region Protected Area World Heritage Site (CFRPAWHS) as a natural site in terms of the following criterion:

- Ecological processes where The Cape Floristic Region is considered of outstanding universal value for representing ongoing ecological and biological processes associated with the evolution of the unique Fynbos biome, and
- Biodiversity and Threatened Species where the Cape Peninsula flora is one of the richest for any similar sized area in the world.

The high-level objective of WHS management: To conserve ecological systems and processes within and around the park and to make a significant contribution to the conservation of the CFRPAWHS by consolidating land into the Park and influencing development affecting the Park.

Objective: To manage the TMNP component of the Cape Floral Region Protected Areas World Heritage Site in collaboration with the partner authorities and in accordance with international and national standards and conventions.

4. Functional Ecosystems Programme

The high-level objective: To maintain natural patterns and processes of the terrestrial and coastal zones of the TMNP.

Objective: To ensure that the natural patterns and processes of the landscapes and coastal zone within TMNP are maintained and improved.

Operating values

These conservation values are deeply held beliefs which guide the formation of principles for decision-making and action within SANParks:

- Respect the complexity, as well as the richness and diversity of the socio-ecological system making up each national park and the wider landscape and context.
- Respect the interdependency of the formative elements, the associated biotic and landscape diversity, and the aesthetic, cultural, educational and spiritual attributes. Leverage all these for creative and useful learning.

- Strive to maintain natural processes in ecosystems, along with the uniqueness, authenticity and worth of cultural heritage, so that these systems and their elements can be resilient and hence persist.
- Manage with humility the systems under our custodianship, recognizing and influencing the wider socio-ecological context in which we are embedded.
- Strive to maintain a healthy flow of ecosystem and cultural goods and services (specifically preserving cultural artefacts), and to make these available, also through access to national parks, thereby promoting enjoyment, appreciation and other benefits for people.
- When necessary, intervene in a responsible and sustainable manner, complementing natural processes as far as possible, using only the level of interference needed to achieve our mandate.
- Implement all the above in such a way as to preserve all options for future generations, while also recognizing that systems change over time.

5. Minister of Forestry Assignment via government gazette in 2005 to SANParks

Tokai and Cecilia State forests form part of the highly threatened Cape Floral Region, a World Heritage Site and there is a need for the planned rehabilitation of the natural environment and the protection of its biodiversity. In rehabilitating the natural environment and managing the land for conservation, eco-tourism and recreational purposes for use by the broader public and to create employment, SANParks will seek funding support for environmental rehabilitation projects including among others, alien vegetation clearing and footpath upgrading”.

6. South Africa is a signatory to the Rio Conventions

The three Rio Conventions—on Biodiversity, Climate Change and Desertification—derive directly from the 1992 Earth Summit. Each instrument represents a way of contributing to the sustainable development goals of Agenda 21. The three conventions are intrinsically linked, operating in the same ecosystems and addressing interdependent issues.

Convention on Biological Diversity: The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from commercial and other utilization of genetic resources. The agreement covers all ecosystems, species, and genetic resources. <https://www.cbd.int/rio/>


7. South Africa is a signatory to the Aichi Biodiversity Targets - Convention on Biological Diversity

Therefore, South Africa is committed to -amongst other targets- conserving 17% of each vegetation type for future generations (target 11) and preventing threatened species extinction (target 12). Only 14% of the area of Cape Flats Sand Fynbos remains, but less than 2% is in good condition, and only 1% is conserved. Tokai Park contains a large part of the Cape Flats Sand Fynbos (1%) that can be conserved and restored (targets 14 and 15). It is therefore a site of national importance and, because of its species richness, global significance. Importantly, we are committed to have -by 2020 at the latest - made people aware of the values of biodiversity and the steps they can take to conserve and use it sustainably (target 1). Tokai Park is a sad case demonstrating how badly South Africa has failed at this. Details of all targets available here: <https://www.cbd.int/sp/targets/>.

It is therefore SANParks' responsibility to ensure that all stakeholders are informed of these considerations and that the revised TCMF comply with these international and national obligations and requirements.

THE VALUE OF CAPE FLATS SAND FYNBOS (CFSF) AT TOKAI PARK

14% CFSF remains, <1% conserved



Erica verticillata, Whorl Heath (🌿), previously extinct, has been reintroduced into the wild at Tokai Park as part of an active restoration programme

Tokai is one of the richest plant areas known on Earth:

- Over 440 plant species have been recorded in CFSF at Tokai
- 147 plant species threatened with extinction in CFSF (36 added in the last 10 years alone)
- Several species are already extinct (e.g. Whorl Heath, Cape Flats Gorse, Pearl Heath, Showy Heath)
- No other city on Earth has so many species threatened with extinction

According to Purcell's historical records, we may expect over 500 plant species at Tokai

- Passive restoration at Tokai Park has been a great success, with over 350 plant species recovering from seedbanks
- Seedbanks have persisted for over 100 years under pine plantations, recovering most spectacularly in areas prescribe burned
- Wildlife, such as Cape Fox, Porcupine, Caracal, snakes and wild bees, is now recorded here

THREATS



These maps show the City of Cape Town (CT) in black; growing rapidly, consuming 12 km² of new land each year and 1/3 of our CFSF in total. They show only urban transformation. Agricultural transformation is responsible for us losing the other 2/3.

CFSF (in orange on maps) is endemic to CT (it occurs nowhere else). It is a lowland Fynbos type, occurring only at altitudes of 20–200m. These flats are favoured for development.

Poor management (a lack of prescribed burns) and the retention of pines pose major threats to the CFSF at Tokai.



OUR RESPONSIBILITY

The 20 Aichi Biodiversity Targets

South Africa is a signatory to the Rio Conventions and Aichi Targets, and is committed to conserving 17% of each vegetation type for future generations (target 🏠) and preventing threatened species extinction (target 🏠).






- Only 14% of the area of CFSF remains, but less than 2% is in good condition, and only 1% is conserved.
- Tokai Park contains a large part of the CFSF (1%) that can be conserved and restored (targets 🏠 and 🏠). It is therefore a site of national importance and, because of its species richness, global significance.

WHAT CAN WE DO?

Support the active and passive restoration of CFSF at Tokai Park. CFSF must be zoned and conserved, and degraded areas restored. Restoration = alien clearing and natural fire regimes being re-established (prescribed burns).

Fire is crucial in allowing plants to rebuild their seedbanks and establish minimum viable populations for CFSF to remain self-sustaining. Tokai is special as, worldwide, only it and Blouberg Nature Reserve are suited to long-term CFSF conservation.

Competing land uses (such as shaded walks) need to be moved to less sensitive habitats (e.g. the many green belts which have alternative, shaded walking routes in the proximity of Tokai Park).



 Join our mailing list for events: tokaifynbosfriends@gmail.com
 Join our events: walks, talks and alien hacks
 
FRIENDS OF TOKAI PARK

Our infographic can be downloaded here: <https://tokaipark.com/tokai-park/biodiversity/>

Issue 2: The integrity of the TCMF Review Process

We have some concerns with the proposed review process, which need to be clarified for the sake of transparency, and perhaps this can be done in the next presentation by the facilitators. The last stage of Phase 1 is to “*Capture, compile and summarise issues, comments, concerns received*”. We raised this question at the facilitated engagement session in May 2021, however the facilitators misunderstood the question. The question was: “*will the process be scientific or not*”. The facilitators used the question as an opportunity to slam scientists and state that each person will be given equal weighting. However, the question was about the process, not about individuals. Specifically: it is not clarified whether the last stage of phase 1 is to be quantitative or not. Will the issues, comments and concerns be weighted by incidence, i.e. taking a democratic approach? If not, why not? How would this prevent extreme and uncommonly held views being given equal weighting to reasonable and commonly held views? If yes, then how will the facilitators address those who do not have a voice? Such as the biodiversity: fauna and flora? This is a speciesism ideology, which considers humans to be more important than other species. Is this a worldview that has been transparently explained by SANParks and accepted by all involved?

We maintain that working with opinions is impossible, you will never be able to please everyone. There will always be someone that is unhappy with the outcome. This is why mandates and constitutions are critical, as well as legislation. It is important to return to the facilitators’ misunderstood and very telling response that “all opinions will be treated equally”, where the issue of expertise comes in. Although this is a public participation process, how can this be the only process guiding the outcome of this management framework review? How can experts not be consulted? As an example, when the City of Cape Town proposes new strategies (e.g. climate change strategy, water strategy), the strategy is drafted by experts, and the public is not involved in this stage. Once a position is drafted, by the relevant experts, this statement is circulated and the public is allowed to submit comments. While there is much transparency to be desired in the CoCT process, they appear to lean more to the side of hardly any public participation and full reliance on experts, while SANParks appears to lean entirely on public participation. Neither is healthy. There is nothing wrong with consulting experts, and the public understands and accepts this for all other matters. So why not in this case? Why is this case being treated so differently?

It is not explained how, but the first stage of Phase 2 is to “*Conduct focused workshops to address any emerging issues*”. How will the topics of these workshops be decided? Who will be invited or allowed to attend which workshops? This part of the process is still unclear.

Issue 3: Transitional planting is ecologically unviable

Ecological context

The idea of trees being part of a landscape is, in South Africa, a colonialist idea. Besides Silvertrees and Waboom, fynbos has no trees. And in Sand Fynbos neither of those tree species occur. The only exception in fynbos landscapes is small pockets of Afromontane Forest confined to fire-sheltered kloofs, which have been shown to have been expanding in Table Mountain National Park, [forest invading the fynbos](#). Trees in fynbos [negatively impact biodiversity, increase the fire risk and guzzle water](#). They cost the South African economy billions of Rands every year in damages, and hundreds of millions each year to clear. Surely the manifold ecosystem services and biodiversity value provided by the fynbos outweigh the recreational benefits of plantations (**Figure 1**)? There is not logical, financial nor ecological defence for retaining trees in fynbos.

Ecosystem Services of Tokai plantations compared to fynbos

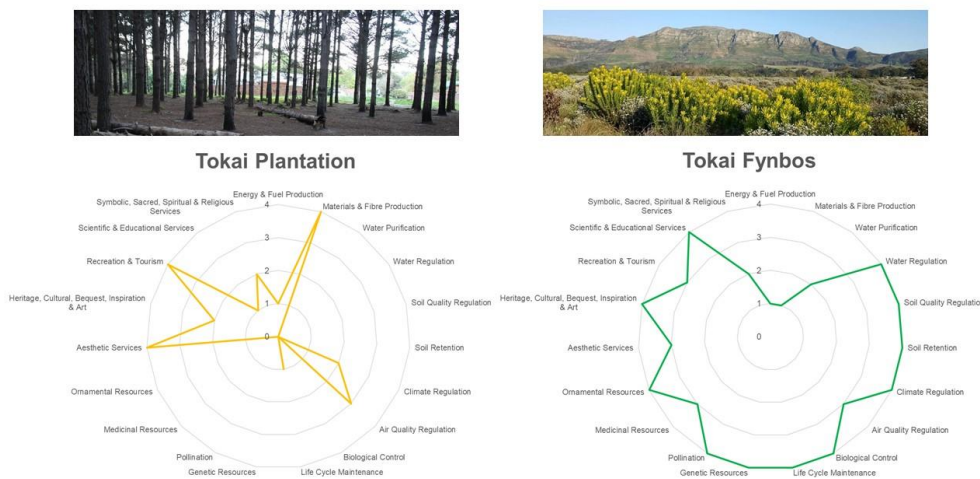


Figure 1. An estimation of the ecosystem services provided by plantations relative to the Cape Flats Sand Fynbos at Tokai Park.

Transitional planting (the planting of trees for one fire cycle), is ecologically and financially unviable, and is not aligned with the TMNP management plan. Therefore, the controversial TCMF was very poorly facilitated, culminating in lingering conflict within the community, which is often portrayed to be a public versus SANParks battle, but is in fact much more complicated than this. The public is divided on the future of these areas. Unfortunately this debate is further complicated by the public's misperceptions of the value of trees, and the global perpetuation of the [problematic tree-planting frenzy](#).

A major concern is fire safety. Alien pine plantations are not compatible with restored fynbos which needs to undergo relatively frequent dry season prescribed burns (+/- every 10-15 years). Whilst well maintained Cape Flats Sand Fynbos has relatively low biomass, pine and other plantations carry dangerous fuel loads, placing the community adjacent to the park in danger. The Californian fires of 2017-2018, and the Cape Town fire of 2021 bear testimony to this danger.

In addition, there are several critical ecological considerations that render transitional planting - whether “indigenous” or alien (or any other proposed use of the park) entirely incompatible with biodiversity conservation at Tokai Park. Here we briefly highlight these.

Ecological considerations for maintenance of biodiversity at Tokai Park:

1. The size of the area (i.e. area alone) is important to biodiversity

Biodiversity / biogeography show that the size of a biodiversity ‘Island’ alone determines the number of species that can occur within that space over time. A small area can only hold a relatively small number of species while a larger area can hold relatively a larger number of species. The relationship between how many species are added as the size of the conservation area is increased is largely a ‘S-shaped curve. As smaller areas are increased in size, in reality more species are added faster. This likewise has implications for the loss of small areas at Tokai Park. If Tokai Park is not large enough it will not be able to maintain its species richness, and no matter what actions are subsequently taken, species will go extinct due to relaxation and extinction debt.

2. The smaller the population, the greater its chance of becoming extinct

The possible chance of successfully rescuing a species on the brink of extinction depends on the number of remaining individuals. The chance of say 2 Panda’s is less than 10 Panda’s, which is less than 50 panda’s, which would be less than 100 panda’s. There are many plant species that only occur in Sand Fynbos (are endemic to this vegetation type) and many with tiny populations that are highly endangered and have some of their last populations at Tokai Park.

Plant species populations need a certain area to maintain their minimum viable populations. Unless these areas are large enough, conservation of these species – SANParks’ mandate – is not possible.

3. (Fynbos) Plant populations migrate across the landscape

Although plants themselves are rooted for an individual's life span, plants migrate across landscapes intergenerationally through dispersion (spreading their seeds). Patches with large overstory Protea shrubs may be replaced with shorter Erica heath at other times. A number of reasons have been proposed for this cycling, including local nutrient depletion, plant pathogen avoidance, climatic conditions and postfire recruitment dynamics. Hence the potential space to move (disperse into) is as important as where you currently live if you are a plant. Therefore, Tokai Park cannot be sliced up into different sections for different reactional uses (e.g. playgrounds, gardens etc) as this would further limit the available area for plant (and animal) dispersion, which could further threaten critically endangered species.

Summary

Therefore, for points 1, 2 & 3 for lower Tokai. Park, the total amount of area available, the size of regeneration populations and space to move around are all fundamental for ecosystem

functioning. Currently the space taken by pines is significantly impacting on 1,2, & 3, and the proposed transitional planting would further reduce ecosystem functioning.

One additional major issue is that there is no evidence that under transitional planting (whether “indigenous” or alien species) that fynbos seedbanks will be maintained. The concern is that adding one last transitional planting cycle of trees, may result in seed bank depletion, especially for critically endangered Sand Fynbos species. It is extremely premature to be proposing and implementing something like transitional planting when modelling studies have not been done. Playing Russian Roulette with our critically endangered Sand Fynbos does not seem sensible for a conservation organization like SANParks.

Issue 4: Dangerous precedents for public opinion to shape conservation during a time of rapid biodiversity decline globally

This conflict and the way it is being handled is setting a dangerous precedent for management of critically important biodiversity areas to be shaped by public opinion alone, with no regard for sound scientific process and regulations, agreements and policies governing the land. Public opinion alone is not enough to base critical conservation-related decisions on. Opinions may be informed by knowledge (linked to education), and are connected to value-systems, which importantly, are subject to change. Therefore, while it is important to engage the public, education is also required. We know that if people are not taught about our biodiversity, we will not appreciate it. In the words of Baba Dioum (1968): "*In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught.*" -Baba Dioum, 1968).

Even if SANParks make critical conservation decisions based on public opinion alone, what shall the mechanism be? A democratic vote? If so, what steps will be taken to ensure that this vote would be reflective of a diversity of different stakeholder groups, and not just the voice of those with agency, resources, capacity and time to give input? Making critical conservation decisions based on public opinion alone is dangerous, as it raises concerns about equality. Additionally, what about the voices that cannot speak? Such as those of future generations not yet born (which our constitution explicitly makes provision for)? Likewise, what about plants and animals who would not have a vote? Do they have the right to existence? We argue that SANParks giving the impression to the public that only their opinion will shape this review process (at the meeting in May 2021) is irresponsible. As we demonstrate in "*Issue 1: Governance*" there are a suite of regulations, agreements, and mandates to be considered. These should set the context for the public to assist with determining the future of Tokai and Cecilia as part of TMNP.

SANParks has also expressed during the first stakeholder meeting in May 2021 that only public opinion will drive this process, and that input from experts will not be considered. This also sets a new, and dangerous precedent, where opinion prevails over expert opinion, and scientific process (see also "*Issue 2: Integrity*"). Scientific research has its place in informing restoration, conservation and therefore management plans. Where a bridge collapses, civil engineers are called in to give expert advice on how to fix or rebuild it. There is not a public participation process. Where an airplane is experiencing a technical issue, and is in free-fall, it is likely that most people on the plane are relieved that the experts (the pilots) are handling the situation. The passengers do not hold a public participation process about what should be done. So why, when there are issues relating to conservation, are experts not brought in (i.e. ecologists)? Why would the expert opinions of trained scientists not be held in high regard? When ecological experts suggest that the conservation of Tokai Park is critical to help halt extinction of Sand Fynbos species, why is this ignored? The answer seems to lie in vested interests, different members of the public have different vested interests for the land. Therefore, these desires should be answered by the policy requirements related to the land (see "*Issue 1: Governance*"), not with the public given carte blanche.

We are experiencing a period of rapid biodiversity decline globally. According to a 2019 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) [report](#), nature is declining globally at rates unprecedented in human history, with grave impacts on people around the world. Many organizations across the world are taking steps to halt the extinction crisis. For example, the Centre on Biological Diversity is calling for a \$100-billion [investment in endangered species](#) and protection of 30% of our lands and ocean waters by 2030 and 50% by 2050. Recognizing the global emergency of extinction and ecosystem degradation, the United Nations has declared the next 10 years the “[Decade on Ecosystem Restoration](#)”. They state: “*Ecosystems support all life on Earth. The healthier our ecosystems are, the healthier the planet - and its people. The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change and prevent a mass extinction. It will only succeed if everyone plays a part*”. Almost the entire world acknowledges the biodiversity crisis, and is taking steps to halt extinction. Biodiversity targets will be discussed at the COP 15 meeting later this year. Why, in arguably one of the most affluent cities in the whole of Africa, is biodiversity conservation taking a back seat, in favour of a few people’s recreational desires and opinions?

South Africa makes (world renowned) provision for the environment in our constitution, and in numerous laws and policies (e.g. NEMBA). Yet despite all of the years of efforts by countless people to protect biodiversity, all of this is being thrown out, and a “community” (those in the community with agency, with resources and with capacity) are being allowed to shape the future of a core conservation area without consideration of any of these regulations, policies, and agreements? This sets a dangerous precedent whereby conservation can be sidelined for various agendas, whether it be recreational desires, or economic profit, based on the argument that everyone’s opinion counts.

People have manifold opinions and are often resistant to change. However, there are numerous examples in the Cape where alien trees have been removed, and the people (although initially resistant) have adapted and come to appreciate their natural heritage (e.g. most notably Silvermine, which was also in part previously under pine plantation). In the next section we also discuss whether behavior should (or could) change, or whether the environment should be adapted to human desires and preferences.

Changing the environment or Changing behaviour

The desire for shaded recreation has been the driving motivation for the retention of pines or planting of trees (transitional planting). This raises two questions: *are recreational activities dependent on shade?; and vice versa is shade being used for recreational purposes?*

In terms of the TMNP as a whole, the majority of the recreation by local Cape Town residents usage occurs in un-shaded natural fynbos and Afromontane pockets. The Mountain Bike (MTB) routes are more than 90% unshaded, horse-riding routes are similarly mainly unshaded, and dog walking routes are probably around 85% unshaded. Hiking routes are more than 95% unshaded

and rock climbing is almost 100% unshaded. From the past clear-felling areas, e.g. the Back Table, Silvermine, Lions Head etc are all still well used for recreation and even increasing in diversity of use. As such, recreational use in the TMNP does not appear to be dependent on shade.

Are shade areas being used more than sunny areas? Usage from visitor surveys and Google Analytics show that the peak period of use is early mornings. TMNP users are generally up early, for their morning walks, runs, strolls etc, and by mid-morning there is a drop in TMNP usage. Areas with shade follow this general pattern too. During the middle of the day the majority of TMNP users are not in the park, but doing other activities (e.g. work, shopping, schools, etc). There is a second peak at some sites, towards mid-afternoon, which looks more to be governed by proximity to the suburbs than the provision of shade. Importantly, areas with shade do not show peak usage during the middle of the day, when they should be used the most if users were needing the shade during high midday temperatures.

In essence, the majority of Cape Town residents are / have / do change their behaviour to make use of the naturally cooler times of day to make use of TMNP, with a minority seeking artificial shade during the peak day-time temperatures. Therefore, is it necessary to compromise biodiversity conservation at Tokai Park for a minority who seek shaded recreation in the middle of the day?

One reason that Tokai Park gets additional attention is that it is flat, compared to the majority of TMNP which is probably around 99% mountainous. Lower Tokai is one of the only continuous (natural) flat sites as part of TMNP in the southern peninsula. Not everyone can or wants to walk up and down mountains. Along with the biodiversity loss of the lowlands, we have also lost sites for recreational diversity. That said, there are still many greenbelts (about 10 near Tokai Park, amounting to over 19km of trails) and various city parks which are also flat. Thus perhaps the real question in all of this is how can we increase the recreation diversity of landscapes in the wider area, as to allow for diverse land form types (shade area / non shade) in flat areas. A critical question is: *why should all of this try to be contained within a core conservation area at Tokai Park?* Where are the other opportunities in the landscape to achieve these goals? (See *the FOTP Vision for Tokai Park*).

Therefore, why should all the proposals for shaded recreation be accommodated at Tokai Park, a critical biodiversity area? Shaded recreation is incompatible with all the regulatory and policy frameworks governing the protection of biodiversity as well as SANParks vision and mandate (see *Issue 1: Governance*). Creating more shaded recreation opportunities in other areas will work just as well, such as in neighboring greenbelts, and city park land. When investing in these areas, the community should also keep in mind the “green apartheid” concept (<https://www.sciencedirect.com/science/article/pii/S0169204620303947>) and make sure that investments into shaded recreation take place equitably, creating equal opportunity for the rich southern suburbs, and the poorer Cape Flats alike.

Practical Request

On a practical note, with the 3rd wave of Covid-19 upon us, we would like to request that all subsequent working groups be entirely virtual. And that Zoom is used rather than Teams in the future so that we do not have technical issues again.