

Every picture tells a story

THE CAPE AFLAME

CAPE TOWN'S DANCE WITH FIRE

Know the story

The definitive story of the fires of 2015 with all profits going to Cape-based volunteer wildland-firefighting, animal-welfare and other public-benefit organisations



For residents of Cape Town's Southern Suburbs and the coastal villages of its Deep South, 1 March 2015 dawned shortly after midnight. Mimicking the early morning sun, which would later rise above the eastern horizon, a fiery orange corona – its colours and hues shifting and changing as they reflected off or merged with tendrils of fast-moving cloud and billowing smoke – rose above Muizenberg's St James' Peak.

Over three days, in near gale-force winds and record temperatures reaching 42.4 °C, the Muizenberg Fire ripped across Cape Town's famed Peninsula – from False Bay in the east to the Atlantic Ocean in the west – cutting it in half and laying waste 5,120 hectares of fynbos covering the Table Mountain National Park's mountainous Central Section. Like no fire before it, the Muizenberg Fire was covered, minute by minute, hour by hour and day by day, by mainstream and citizen journalists as it destroyed homes and businesses on both sides of the mountain.

Using the Muizenberg Fire as both a lens and a mirror, *The Cape Aflame* explores the development, over many decades, of an integrated fire-management system in a city that has, for centuries, danced around the management of fire. This detailed and visually stunning record of the great blaze is dedicated to all South Africans who rallied to suppress it – most especially those who sacrificed their time, skills or lives to do so.



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The Cape Aflame belongs to those touched by the Muizenberg Fire of March 2015. The selfless manner in which members of our local and global communities responded to crisis, opportunity and each other has produced a permanent record capable of raising funds able to sustain Cape-based wildfire-fighting, biodiversity and animal-welfare organisations.

During the first days of March 2015, our increasingly distributed and networked information media allowed us to speak to each other in real time as wildfire roared across the Central Section of Table Mountain National Park (TMNP). Using everything from phones to drones, you had it covered and, with few exceptions, all information in this book is sourced from the public domain.

You wrote it and you photographed it.

The Cape Aflame distils to text and commits to record some of the many thousands of reports emanating from the fire and illustrates it with hundreds of photographs donated by selfless local and international professional and amateur photographers whose willingness to give – months after the fact – attests to their enduring generosity.

In as acid a test of reportage as could be envisaged, *The Cape Aflame's* curated content was subjected to the exacting scrutiny of esteemed practitioners and scientists with first-hand knowledge of different aspects of fire, fynbos and the interaction between the two.

We thank, without reservation, TMNP Park Manager Paddy Gordon, TMNP Fire Manager Philip Prins, Cape Peninsula Fire Protection Association (CPFPA) General Manager Pierre Gallagher, TMNP Section Operations Chief Clinton Dilgee, South African National Biodiversity Institute (SANBI) restoration ecologist Dr Tony Rebelo, Human Wildlife Solutions (HWS) and UCT Baboon Research Unit (BRU) coordinator Dr Philip Richardson and former Volunteer Wildfire Services (VWS) Creative

and Marketing Director Patrick Ryan for their eminently qualified support, guidance and oversight in this regard.

For relating their first-hand experiences on the Wildland Urban Interface, we are deeply indebted to Nic Bothma, Maureen Lavies, Kelly Vlieghe and Ryan Heydenrych.

One graphic requires special mention. VWS member Peter Wynne's fire-progression map leads us step by step and day by day through the convoluted topography of the Cape Peninsula and the unpredictable vicissitudes of wildfire. We are immensely grateful to Peter for his many hours of careful work and qualified craftsmanship. His map connects a past event to the pages now before us. Many deserving organisations would be far poorer without that link between past, present and future.

It is to these organisations – and, especially, our intended major beneficiaries – that we turn to last. We do so because they have come to expect it of us.

Those staffing, serving as members of or doing voluntary work for the CPFPA, VWS, the Cape of Good Hope SPCA and the SANParks Honorary Rangers (Table Mountain Region) are much like you and me. However, for little or no pay, they go the extra mile to ensure that each of us continues to enjoy the delicate balance maintained between our extraordinarily biodiverse wildland and our urban areas.

Behind every apparently effortless achievement lies a history of hard, unforgiving work undertaken by people of resolve, determination and enduring passion. If, to the visitor, Table Mountain National Park presents as a serene natural miracle rising through and above urban sprawl and pristine ocean, we have our beneficiaries and their national, provincial and local counterparts to thank for making that which is apparently miraculous appear at all.

Cape Town, with the assistance of public and private entities, and drawing from centuries of hard-earned wisdom, has a very good story to tell. It is your story. We thank you for sharing it with us.

FOREWORD



The fires that swept Table Mountain National Park’s Central and Southern sections in March 2015 remind us just how ambiguous our relationship with this potentially destructive force of nature continues to be.

While we, as the caretakers of one of the world’s greatest natural wonders, Table Mountain National Park (TMNP), welcome the spontaneous, ecologically beneficial outbreak of fire, a key objective of our integrated Fire Management Plan is to contain and suppress this volatile force, lest it bridge the Wildland Urban Interface and cause damage to life and property.

Sadly, fighting simultaneous fires at Muizenberg and Cape Point took its toll on our firefighters and tragedy visited us at Cape Point. This incident heightened our collective awareness that our firefighters – men and women from several fire management organisations – are not only skilled professionals; they are heroes too.

Putting their lives on the line, often for little or no pay, they risked their all so that we, as Capetonians, South Africans and citizens of the world across every social and economic divide may continue to enjoy the complex interplay of our world-class but competing environments – the natural and the built – for the foreseeable future.

We put the finishing touches to the 2015 edition of our Park Management Plan in recognition of the suffering and loss caused by the Muizenberg, Cape

Point and other fires. We will restore and rehabilitate that which has been damaged and assess how we have progressed since 2000 with our partners at a national, provincial and local level.

All indications are that this progress has been enormous and it is appropriate to have a book such as this to highlight it.

Where, before 2000, we had laid the foundations for the future, we have used the past 15 years to build on them. The mitigating role played by the elimination of alien vegetation, our infinitely more complex network of circum-peninsula firebreaks, and other TMNP programmes cannot be overstated.

Partnerships forged with all relevant fire authorities proved critically important to readying us for the ‘big one’. Were it not for close collaboration in logistics, planning and the deployment of firefighting forces from the national to the local level – including our highly skilled Volunteer Wildfire Services – the fires of 2015 might have left behind them a trail of unimaginable destruction.

As we finalise our 2015 Park Management Plan, we do so mindful that, with your support, generosity, sense of community and commitment to a heritage older than life itself, our firefighters were able to avert catastrophe beyond the Wildland Urban Interface.

Your generosity and unity of spirit made the difference, and for that we, who are charged with preserving this unique environment, thank you as much as we do our heroes on the fireline.

Paddy Gordon

Park Manager: Table Mountain National Park



PREFACE

“It’s hot. You can’t see. You can’t breathe. You have no idea if the next step you take will see you hurtling down a ravine or stepping onto safe ground. The only thought driving you is that of getting yourself and others out of the inferno alive.”

Welcome to a day in the life of the people who make up the Volunteer Wildfire Services (VWS). If you live in the Cape Peninsula, you undoubtedly saw them fighting countless fires throughout the Western Cape during March 2015.

There may be no pay cheque for them at the end of a long night fighting a blaze, but there is the satisfaction gained from a job well done and having provided an essential service. Although the work is backbreaking and exhausting, people volunteer each year to keep us, our loved ones and our natural environment safe.

The Cape Peninsula – with its hot, dry, windy summers – is prone to wildfires, be they set with malicious intent or by accident. Fynbos is highly susceptible to fire and, with such combustible veld on Cape Town’s doorstep, the City and Table Mountain National Park (TMNP) officials have their hands full during the annual fire season.

Following the devastating fires of 1999/2000, I was invited to join the fledgling volunteer firefighting unit set up by the late Cas Theron – then TMNP Head of Fire Management – and Regional Ranger Philip Prins at the request of David Daitz, TMNP’s first Park Manager. Fifteen years later, I’m immensely proud to see how what we now call Volunteer Wildfire Services (VWS) has grown into a highly respected, formidable firefighting force.

VWS is a voluntary organisation that proactively and reactively assists CapeNature and TMNP combat fires that invariably occur in the Western Cape each year. Today, it counts some 180 members based at three stations: Newlands, Jonkershoek and South Peninsula.

Listening to choppers buzzing overhead and sirens signalling teams rushing to extinguish flames engulfing untold hectares of land, I’m exceptionally grateful to the men and women who keep our homes, livelihoods and environment intact. Each time we picnic, hike, ride or enjoy the natural beauty surrounding us, I’m reminded that we do so thanks to them.

Disasters, whether natural or manmade, bring people together. Overwhelming community support for organisations converging from around the country during the fires of March 2015 will forever serve as a reminder that, when we work together, we can accomplish that which seems impossible.

However, the job doesn’t end when the fires go out. I therefore hope we will all continue to work together in safeguarding our beautiful home, South Africa.

Braam Malherbe



Braam is an internationally renowned extreme adventurer, conservationist, philanthropist and author. Author of 2006’s bestselling *The Great Run*, which chronicles how he and friend David Grier became the first men to run the 4,100-kilometre Great Wall of China, he went on to run the 3,200-kilometre coastline of southern Africa in 2008. In 2012, he took part in a race to the South Pole to highlight climate change. Famed for his philanthropic and youth-development work, Braam will, in 2016, embark on a 15-month, non-motorised circumnavigation of the globe along the Tropic of Capricorn to raise awareness of planetary challenges.



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INTRODUCTION

During the early hours of Sunday, 1 March 2015, a lick of flame atop Muizenberg Peak's Peck's Valley overlooking False Bay sought and found the fuel it needed to become a raging fire.

Over the next few days, fanned by high winds and fuelled by dense fynbos and alien vegetation, the resulting conflagration swept across the mountains separating the Indian and Atlantic oceans – turning 5,120 hectares of the world's most diverse plant kingdom to ash.

That lick of flame did more.

It eliminated, for a while, distinction between the city's built and natural environments. The domestic and the wild, the affected and the unaffected, the ordinary and the exceptional fused in the heat of the moment to confront immediate necessity.

Drawn like oxygen to the flames, Capetonians from every walk of life – assisted by many from across South Africa, united in containing and suppressing a perceived threat to that which makes their city and the Cape Peninsula one of the world's most sought-after tourist destinations – Table Mountain National Park (TMNP) and the towns, villages and historic sites beneath it.

It did still more. Covered and communicated by myriad information technologies not available to us ten years ago, the Muizenberg Fire of 2015 showed us that concerted, collaborative action driven by common purpose and far-sighted planning by those charged with the care of the Park, cannot fail.

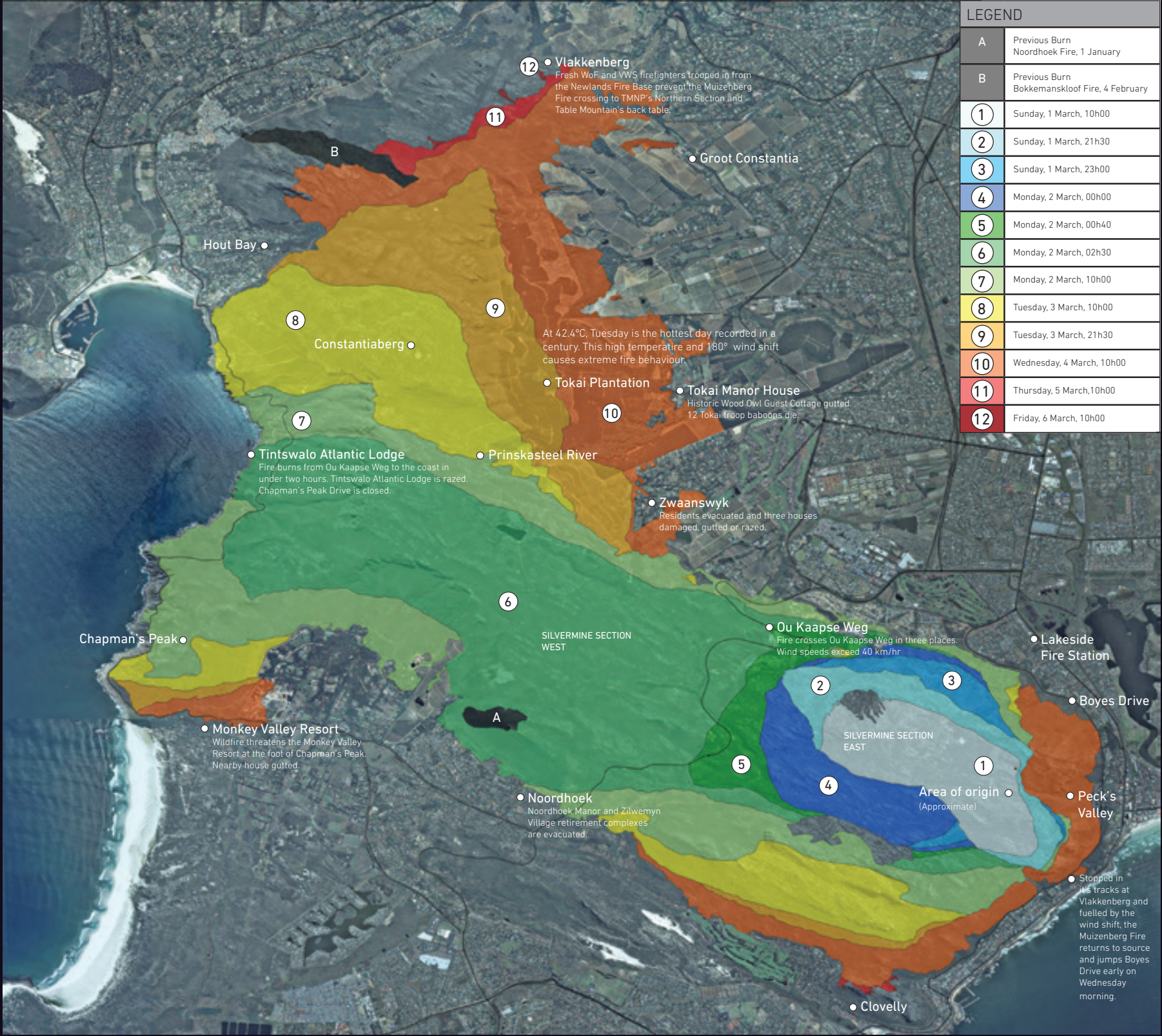
It allowed us, in retrospect and as citizens not subject to a media-filtered narrative, to revisit the wisdom or otherwise of fire-management strategies preceding and following the great fires of 2000. And it allowed us, armed with easily accessible information and qualified knowledge, to consider ways of ensuring a harmonious future coexistence with that inevitable expression of nature at the Cape – fire.

It did yet more. It enabled a fast-growing body of amateur and professional photographers to record the spectacular beauty, the overwhelming power, the awe-inspiring spectacle and the unrelenting, insatiable appetite of fire. It afforded those wielding cameras opportunity to capture moments of heroism, courage, devastation, success, failure, resilience, adequacy, inadequacy, immense loss and inspiring hope. It mirrored and captured, through the viewfinder and the lens, an inspiring and educative story of Capetonians united – simultaneously at one and at odds with nature.

It is a story that needs to be told. It is our story.

If we internalise the story of the Muizenberg Fire, that tongue of flame above Muizenberg on 1 March 2015 becomes a beacon, lighting our path to a future lived in concert with nature. If we choose to ignore it, that flame will inevitably return as something very different – and consume us.

“[E]arly Portuguese explorers, who rounded the Cape of Good Hope in the fifteenth century, referred to the interior of South Africa in their ships logs as ‘Terra dos fumos’ – the land of smoke and fire.”



FIRE PROGRESSION MAP

Mapping firelines is far from a matter of guesswork and, while there are a number of advanced technologies available – generally used abroad, we South Africans typically use simple, effective and readily available means and technologies.

The most commonly used is a recce flight over the fire each morning by the Incident Commander, Operations Section Chief and a member of the Planning Section. The Planning Section Chief (or Situation Unit Leader) plots the information we gather from these flights on Google Earth.

Used with high-resolution photographs, Google Earth is an extremely practical tool that enables us to view (or ‘see’) the terrain as it actually is. We are easily able to recognise features seen from the air and navigate the map.

While it may seem a simple tool, it is an immensely powerful aid to plotting and displaying data so that it makes sense to most people. We use this daily map update to determine daily planning objectives and strategies and it forms the basis of the progression map.

VWS teams – equipped with hand-held Geographical Positioning System (GPS) devices – are dispatched to the fireline each day. The precise track our teams take is one of our most accurate sources of information. Because the exact position of each crew is known, the GPS data allows the Planning Section to draw firelines from the data points sent back to us.

During the Muizenberg Fire, sponsors afforded us real-time photographs on the morning of Wednesday, 4 March (and, again, after the fire) from satellites passing overhead. The gathered information – using infrared sensors and cameras – enabled us to plot maps and burnt areas and build a more complete picture.

Eyewitness accounts from people working in the Operations Section, the Operations Section Chief, Divisional Supervisors and Crew Leaders make

up our final source of information. Their feedback allows us to ascertain intermediate progression data following the morning recce flights.

Armed with this data – together with Google Earth images loaded after the fire – I was able to determine ‘best guesstimate’ firelines and determine the fire’s speed and progress.

Once the Muizenberg Fire had been extinguished, its perimeter was walked with a GPS to fix the fireline precisely. I used this extremely accurate information to plot the final layer of the progression map. The walked fireline also allows us to update veld-age maps at the end of each fire season. The VWS Planning Section tries to walk all fires extending over one hectare to provide the base data for these veld-age maps.

We use geographical information system (GIS) software to prepare the final maps. It is also the source of most of the mapping base data we use in determining possible strategies. In addition to the GIS software, we use other computer packages and applications during and after the fire to assist with data capture and map preparation.

Obtaining rigorously accurate information from all areas on a wildfire such as this presents a huge challenge, especially during times when the fire makes large runs. During the last days of the Muizenberg Fire flare-ups occurred at many locations, which made it more difficult to ensure the accuracy of our information. The progression map presented here is therefore based on a best estimate, using all the information available to us.

Peter Wynne
VWS Planning Section

What made the Muizenberg Fire of March 2015 that scorched across 5,120 hectares of the Table Mountain National Park (TMNP) Central Section stand out from other fires?

Detailed records of 373 fires between 1970 and 2007 in the mountainous, 265 km² TMNP, each of which was greater than a hectare in area, tell us the great fires of January 2000 ‘destroyed’ 8,370 hectares of wildland, land falling within the 30,955-hectare Cape Peninsula Protected Natural Environment (CPPNE) and – on the urban fringe – razed 14 buildings (including eight houses) and badly damaged more than 50 other built structures.

During February and March 1999, from Brandvlei Dam to Du Toit’s Kloof, Franschhoek, the Groenland mountains and Grabouw, fire devoured some 80–100,000 hectares of fynbos over 34 days.

At the close of the 2014/2015 fire season, Working on Fire (WoF) statistics would show that more than 250,000 hectares of fynbos in the Western, Southern and Eastern Capes had been razed.

In short, and while 2015 might have seen the largest single fire and second-largest combination of concurrent fires in the TMNP (a further 985 hectares burned at Cape Point and 7.7 hectares at Scarborough during the same period), we have seen far worse on the urban side of the Wildland Urban Divide.

Technologies and information not available to us 15 or 16 years ago allow us to locate the Muizenberg Fire of 2015 in the context of the wildfire-management policies adopted and implemented before and since 2000 by South African National Parks (SANParks), TMNP management, local, provincial and national authorities, as well as private initiatives.

Today, as members of an approximately 3.75 million-strong public that has nearly quadrupled in size since 1970 (adding close to a million to our number since 2000), we are qualified – within reason – to evaluate the performance of our fire-management authorities in containing and suppressing the explosive conflagration of 2015.

More importantly, the largest fire in TMNP’s recent recorded history not only offers us opportunity to examine our past and present – it also enables us, through TMNP’s existing Fire Management Plan, to educate ourselves in the future of fire management and sustainable biodiversity.





CHAPTER 1

TAKING THE HEAT

“Great misapprehension prevails on the subject [of fire], caused mainly by looking at it from the point of view of an inhabitant of Northern Europe. The veldt fire here is not an incendiary disaster but a natural process, that usually is only dangerous when ignorantly interrupted or for some reason or other, too long deferred.”

David Ernest Hutchins, 1893

Whereas it might have suited the Cape’s environment around 125,000 years ago for fire and its management to be left to lightning and falling rocks, biologists and ecologists aware of the Cape Floristic Region’s unique dynamics fought – through the 19th and 20th Centuries – for a more sustainable fire-management strategy.

Evidence suggests that early pastoralists, from some 10,000 years ago, engaged in fire-stick farming – the regular burning of the Cape’s wildland – to promote the growth of bulbs and tubers.

The first European pastoralists to settle the Cape took note of the indigenous KhoeKhoe population’s use of fire and adopted the practice of setting the veld afire. This, despite draconian penalties (including hanging) imposed until the 19th Century by succeeding Dutch and British occupation authorities keen to reduce the risk of fire to the built environment.

As human settlement became permanent and crops replaced animals, seasonal burning became increasingly infrequent and various factors led to it becoming a public taboo through the 20th Century. The already-established promotion of afforestation to meet the needs of industry and commerce, the British burning of Boer farms during the 1899–1902 South African War, and three decades of persistent drought turned foresters, farmers, the public and the authorities against fire.

Following a finding by the 1923 Drought Investigation Commission that “veld burning” rather than poor rainfall was to blame for agricultural decline, renowned Cape botanist Rudolf Marloth in 1924 echoed the views of his 19th Century predecessors at the Cape, British botanists Ludwig Pappe and John Croumbie Brown:

“[H]undreds of square miles of luxuriant maquis [fynbos] ... have been devoured by the flames during a century or two of reckless burning.”



The wasteland Looking south from the slopes of Constantiaberg Peak, the Silvermine section presents as a charred hulk.

Marloth’s burning anti-fire sentiments remained scorched into the psyche of authorities and the public for the rest of the 20th Century.

Despite forestry researchers and ecologists reporting favourably on the reduction of fynbos fuel loads effected by rotational burning (from the 1940s through to 1968), South Africa’s participation from 1971 in the International Society of Mediterranean Ecology’s MEDECOS programme, and the 13-year Fynbos Biome Project initiated by the Council for Scientific and Industrial Research (CSIR) in 1977, the practice of fynbos fire management remained firmly in the hands of the Department of Forestry from the 1930s until its collapse in the late 1980s.

By 1995, Cape-based fynbos ecologists found themselves high on knowledge and low on funds. The coordination of wildfire suppression remained under the aegis of the largely ineffective Cape Peninsula Fire Protection Committee (CPFPC), established by landowners in 1949. And with the population of Cape Town having doubled since 1970, the land was hopelessly fragmented.

Public land comprised 80 percent of the future Cape Peninsula National Park (renamed Table Mountain National Park in 2004), and was distributed among 14 national, provincial, regional and local landowners. The owners of the remaining 20 percent of the land numbered more than 150. The coordinated, integrated fire-management strategy sought by ecologists appeared to be more an unrealisable dream than a potential reality.

Surprisingly, both the funding and fragmentation issues were to be swiftly and dramatically resolved.

Fifty-one years earlier, in 1945, Cape ecologist CL Wicht, who had conducted extensive research on the rotational burning of fynbos, had said of alien vegetation imported for forestry and myriad other purposes:

“... one of the greatest, if not the greatest, threats to which the Cape vegetation is exposed, is suppression through the spread of vigorous exotic plant species.”

Over the next five decades, research by several institutes and organisations provided conclusive proof that alien, invasive vegetation posed a threat not only to our fynbos, but to the water feeding it.

In 1995, national government – through the Department of Water Affairs and Forestry (DWAF) under Minister Kader Asmal – introduced the Working for Water (WfW) programme, a R400-million poverty-relief, public works initiative aimed at increasing water security and biodiversity by targeting invasive alien species domination, water runoff, soil erosion and the increasing impact of fires.

Fire remained the enemy, but an integrated approach to its management was, at long last, on the national agenda.

In 1998, the Cape Peninsula National Park (later Table Mountain National Park, or TMNP) was formed to integrate and coordinate the actions of public and private landowners. In the same year, the National Veld and Forest Fire Act, Act 101 of 1998, was promulgated to ensure cooperative governance, establish Fire Protection Associations, and decentralise wildfire management.

And, as the calendar marked the close of the first two weeks of a new millennium, all hell broke loose in the Cape Peninsula National Park.

On 16 January 2000, two fires – one on Red Hill, the other just off Ou Kaapse Weg, running through the Silvermine section – broke out and, fanned by a gale-force southeasterly wind and temperature highs exceeding 35 °C over three days, went on to ravage 8,370 hectares of fynbos.

As a community occupying a large urban conurbation, we saw the fires, smelt them and, informed by reports broadcast and printed by the mainstream media, hoped that all attempts by our disparate and fragmented firefighting forces to suppress them would succeed.

We do not know how they coped. We do know that the fires breached the Wildland Urban Interface and caused significant loss to property.

We also know that our fire services, which ultimately won the day, were assisted by a ‘thin blue line’ of highly skilled volunteers equipped with intimate knowledge of the terrain. For the volunteer firefighting unit, more familiar to

us by the name it adopted in 2005, Volunteer Wildfire Services (VWS), the conflagrations of 2000 constituted a baptism of fire.

Formed by TMNP’s first Park Manager David Daitz and trained by Fire Manager Cas Theron and Philip Prins (appointed Fire Manager after Cas Theron’s retirement in 2001), the volunteer firefighting unit proved itself an essential component of any future integrated wildfire-management plan.

On 25 January, Minister of Water Affairs and Forestry, Ronnie Kasrils, announced the appointment of a Fire Investigation Task Team (FITT) and an in-depth investigation into the cause of the fires. Importantly, he noted that the investigation would focus on “... ‘fire protection and not turf protection’, and on coordination between different spheres of government”.

On 26 January, the Western Cape government followed suit and, within weeks, TMNP released its first comprehensive Fire Management Plan – updated in 2004 – for the TMNP, prepared by Greg Forsyth and Jackie Bridgett of the CSIR.

In February 2000, the four-year Ukuvuka: Operation Firestop, “... a joint initiative between the National Government (represented by the Working for Water Programme), the Provincial Government, the Cape Metropolitan Council, the South Peninsula Municipality, the City of Cape Town and South African National Parks” was born.

Funded by private-sector institutions such as Santam, the Cape Argus, Nedbank, Total and the World Wide Fund for Nature (WWF), Ukuvuka’s objective – among others – was to “... pull together the various levels of government (from national, provincial and local authorities), the private sector and general public in a campaign that can truly ensure that such intense fires never happen again.”

Ukuvuka, an isiXhosa word meaning ‘Wake up’, succeeded beyond expectations. Not only did it achieve its primary objective, it used approximately half of its R63.5 million budget on poverty-alleviation programmes. Employing more than 300 people, it cleared some 5,000 hectares of invasive alien vegetation within TMNP’s boundaries and raised awareness of the dangers of invasive alien vegetation among landowners on the Wildland Urban Interface.

In 2001, Cape Action for People and the Environment (CAPE), a 20-year, government and civil-society partnership coordinated by the South African National Biodiversity Institute (SANBI), came into being. Comprising some 40 partner organisations dedicated to conserving and restoring our fynbos and marine biodiversity while benefitting our region’s people, CAPE secured more than US\$230 million in funding during its first ten years. CAPE continues to work throughout the Fynbos Biome to support more than 200 civil-society led projects.

By 2003, following implementation of the recommendations of the Ministerial FITT, driven by the formation of the TMNP and underpinned by the promulgation of the National Veld and Forest Fire Act, Act 101 of 1998, integration of our fire services and their supporting organisations was well advanced.

National government, employing a model that addressed the needs of integrated fire management and the implementation of its Expanded Public Works Programme (EPWP), exemplified by WfW, then announced the award of a tender to Kishugu (formerly the FFA Group of Companies and, before that, the Section 21 Forest Fire Association) to “... implement an aerial and ground resource plan for fighting veld fires”.

The plan was implemented by Kishugu subsidiary, FFA Operations.

Within years, the resulting Working on Fire (WoF) programme, “... mandated to implement Integrated Fire Management, which includes supporting the development of the Fire Protection Association (FPA) structure under the National Veld and Forest Fire Act of 1998” proved “... a best practice model and one of the most effective poverty-relief and skills-development programmes launched since 1994”.

In 2012, a Global Environment Facility (GEF) grant of US\$3.5 million saw the FynbosFire Project established to build the capacity of Fire Protection Associations (FPAs) and further integrate fire management in collaboration with the United Nations Development Programme (UNDP) and public and private-sector agencies.

By 2014, WoF – through Working on Fire International – had established projects and operations on every continent but Antarctica, boasting a suite of fire-management and climate change solutions.

In a seeming blur of behind-the-scenes activity through the first decade of the 21st Century, South Africa (and the Cape, in particular) had more than overcome a century of failed initiatives to integrate wildfire management – it had become a global leader in the field.

We were, at last, well prepared and well equipped to deal with the ‘big one’.

Or were we?

***Fynbos crucified** The devastation caused by a wildfire on 1 March 2015 at Stellenbosch’s Uitkyk Wine Estate highlights our need of an integrated wildfire firefighting strategy on our Wildland Urban Interface.*

“According to the IUCN [International Union for Conservation of Nature], experiments, observations and modelling show that climate change might be the most significant threat facing biodiversity in the Cape Floral Region over the next 50 to 100 years.”

United Nations Educational, Scientific and Cultural Organisation (UNESCO)
World Heritage Centre, 2007

UNESCO goes on to list the three most dire implications of climate change for our Fynbos Biome. These are the warming and drying of shrinking optimal habitats, environmental changes effecting ecosystem changes, and increasing fire frequency.

It then sketches what, today, may be described as a hopelessly optimistic scenario of a mere doubling of atmospheric carbon dioxide and an average temperature increase of 1.8 °C before concluding that the consequences of even limited climate change will be devastating.

Eight years later, backed by authoritative reviews undertaken since 2004 of scientific papers showing overwhelming consensus among scientists that Anthropogenic Climate Disruption or Anthropogenic Global Warming is established fact, we know a lot more.

Our situation is critical. Scientists, locally and globally, are trying to wake us up. So is Nature.

The March 2015 Muizenberg Fire offers convincing proof that, through ignorance and greed and despite the best efforts of our scientists and conservation authorities, we are causing irreparable harm to our Fynbos Biome – a planetary treasure that has adapted itself to fire over millions of years.

Fire is as water to fynbos. Without it, fynbos would not exist. But we are swiftly killing it by unthinkingly and unwittingly ‘overwatering’ it.

In this chapter, we explore the work that has gone into restraining our destructive and avaricious nature, realise how fortunate we are that we still have a Fynbos Biome to protect, and consider how we can best preserve our fynbos – even should it mean working tirelessly to ensure that it survives us.

This subject is as appealing to our senses as a wildfire raging through our expectations of what this book is all about. However, an appreciation of current and future possible realities is essential to uncovering the definitive story of the Muizenberg Fire.

In Chapter 8, we will see Nature’s ability to adapt, survive and thrive and learn of novel and ingenious methods our scientists and authorities use to give our fynbos its best chance of flourishing in a future far more desirable than that outlined here.





CHAPTER 2

FIRING THE FYNBOS

“It is thought that within 50 years Fynbos will be largely replaced with a different, unknown vegetation type.”

Journal of Biogeography, 2006

Consider the above – in any context. The *Journal of Biogeography* is a respected, peer-reviewed journal of more than 40 years’ standing.

Like it or not, and be it by natural means, prescribed burns, accident, negligence or criminal intent, the Fynbos Biome of the Cape Floral Kingdom is far too frequently subjected to fire. Are we to blame for this increasing frequency? And, if so, might our abuse of fire not be the least of our sins?

We will secure the increasingly tenuous future of our most natural asset only by understanding and accepting the harsh reality of our and others’ unknowing roles in putting our Fynbos Biome at risk.

We are in danger not merely of firing our fynbos, but of relegating it to the dustbin of extinction – within decades.

“South Africa’s Western Cape is more botanically diverse than the richest tropical rainforest in South America, including the Amazon.”

World Wide Fund for Nature (WWF)

The Cape Floral Kingdom of the Western Cape and Eastern Cape provinces accounts for less than six percent of South Africa’s surface and less than 0.5 percent that of Africa. Yet, as home to almost 20 percent of Africa’s flora, it hosts an extraordinarily diverse 9,000 vascular plant species (6,200 or 69 percent of which are endemic).

Covering nine million hectares, it is – by far – the smallest of the world’s six floral kingdoms. It is so small that the kingdom comprises one phytogeographic region and province made up of five biomes: Forest, Nama Karoo, Succulent

Karoo, Thicket and Fynbos. The last contains two vegetation groups: five fynbos types accounting for more than 7,000 species, and three types of renosterveld making up close on 1,000 species.

The Fynbos Biome therefore dominates the Cape Floristic Region to such an extent that it is frequently regarded as synonymous. While boasting a biodiversity greater than that of neotropical rain forests – for example, the Amazon Basin – the Fynbos Biome’s sclerophyllous plants, common to Mediterranean, fire-prone climates, thrive in the well-leached, low-nutrient Cape Supergroup sandstone soils of the Western Cape province.

Table Mountain National Park alone boasts 2,285 species, of which 90 are endemic – a greater biodiversity than that of the entire United Kingdom, which is home to some 1,100 species.

Because the Cape Floristic Region meets criteria set by the UNESCO World Heritage Convention adopted in Paris on 16 November 1972 and ratified by South Africa on 10 July 1997, eight protected but noncontiguous fynbos areas covering 553,000 hectares – collectively called the Cape Floral Region Protected Areas – were declared a UNESCO Natural World Heritage Site in 2004. On 3 July 2015, UNESCO almost doubled the Cape Floral Region Protected Areas to 1,094,742 hectares covering 13 noncontiguous areas.

By and large, we as Capetonians know about the Cape Floristic Region. We read newspapers, magazines and tourist brochures. We hear our experts speaking on the radio, watch them on television or divine these facts from the World Wide Web.

We know, for example, that Cape Town is the ‘floral extinction capital of the world’.

SANBI informs us that the South African Red Data Book now lists some 1,800 species that are either endangered or face extinction. Conservation South Africa (CSA) labels this proclaimed biodiversity hotspot the “world’s hottest hotspot“, and we are suitably appalled. We know too that, beyond budgetary constraints, the two greatest threats facing our biodiverse floral kingdom are:

- invasive or alien plant species, and
- fire

... and that we need to eliminate these scourges using every resource available to us.

And we’d be horribly, horribly wrong in viewing fire in the same light as invasive species.

“The reality is that this has been one of the worst years that the City has faced in terms of fires.” ... “I would like to thank those residents who have come out and offered all kinds of support to the team that is battling the fire. People have come here with words of encouragement, with food, drinks and just about whatever they had to express their appreciation and support.”

Cape Town Mayor Nomaindia Mfeketo, 27 January 2006

We have been here before. And before that. Yet who remembers the words of the Mayor of Cape Town following the devastating blaze that swept the northern face of Table Mountain in January 2006, burning 700 hectares, killing a British visitor and destroying half the Fynbos Biome’s silver tree (*Leucadendron argenteum*) population?

Very few.

“The vegetation is dependent on fire to stimulate new growth in a 15-year cycle.”

Table Mountain Aerial Cableway – Tourism Information Website



And now? An agama lizard casts a querying eye over the dramatically changed landscape of TMNP’s Silvermine section. Lizards have adapted to fire over many millions of years.

As well-intentioned and true as this information may be, its lack of context ensures the reader will pass over it without a second thought – or even, perhaps, without thought at all. Our tendency is to remember the 2006 fire only as historical fact. Even so, history and fact dictate that, without fire, fynbos would cease to exist.

A perfunctory scan of TMNP’s detailed Fire Management Plan (FMP) – currently under revision – merely tells us that the comprehensive document targets fire prevention, protection, suppression and recovery as well as continuous improvement in terms of ISO 14001. It uses four strategies, backed by seven activities, to meet two core objectives – namely

- to ensure the conservation and continued survival of viable populations of all the indigenous biota in the area, and
- to minimise the potential and actual damage done by fires.

However, and much unlike the tourism information snippet, a careful reading of the clearly articulated FMP leaves no doubt that fire, in a protected area comprising less than half of one percent of the Fynbos Biome, is needed for fynbos – a fire-prone and fire-dependent ecosystem, to survive and thrive.



Fire management, in TMNP’s case, encompasses both the application (through prescribed burns) and suppression (through firefighting) of fire. To meet its objectives, the managed application of burns (or prescribed burns) is subject to four guiding principles:

- Fynbos needs fire to maintain the health of its diversity, its ecosystem and its interdependent animal species.
- The prolonged absence of fire allows senescence (or the inability of cells to replicate themselves) to set in and fynbos becomes moribund after approximately 25 years.
- Given their diversity, different fynbos species in different distributional ranges require variation in the time between successive fires.
- Our existing fynbos species’ continued survival and coexistence depend on a particular and specific fire regime.

As Table Mountain Aerial Cableway’s website tells visitors in passing, fynbos – as a fire-prone and fire-reliant plant type – relies on regular fires for its survival. A fine-leaf, oil and resin-rich vegetation, it has lent itself to fuelling fire for some three million years and is wholly adapted to fire regimes driven by natural events such as sparks from falling rocks or lightning strikes.

Storing their seed or fruit in serotinous or woody seed cones, proteoids rely – in greater part – on fire to free these seeds, which are then spread far and wide as sprouters by the Western Cape’s strong summer winds. At other times,



seed dispersal is dependent on some species’ ability to coppice – whereby seeds stored in the stem resprout. Yet others are prompted to seed merely by the presence of smoke or fire. Some 1,200 species rely on insects such as ants to bury and feed on the surrounds of their seeds (a method of dispersal known as myrmecochory), thereby denying rodents and fire access to them.

As a rule, proteoids, ericoids, restioids and geophytes need fire to flower, germinate or release their seeds.

So, if fire is not the problem, what is?



*We are the bed of coals on which Table Mountain rests. Where once, perhaps
50 years ago, Cape Town bordered what is today a National Park, it now
encircles the mountain and encroaches on formerly hallowed ground.*

In 2010, the City’s Environmental Resource Management Department’s Biodiversity Management Branch reported that, of Cape Town’s 19 vegetation types – six of which are endemic – ten are critically endangered, three are endangered and four are vulnerable. Peninsula Sandstone and Peninsula Granite Fynbos are listed as being of ‘least concern’. Endemic to Table Mountain, its foothills and the Peninsula Chain, they fall within the boundaries of Table Mountain National Park and are protected. The Biodiversity Management Branch predicted that, by 2020, Cape Town will no longer have any natural veld to conserve. Moreover, it will be too late to conserve more of our unique biodiversity than is already protected.

Like invasive aliens, we are swiftly destroying TMNP, other parks and nature reserves within the Cape Floral Kingdom Protected Areas World Heritage Site, and our greater Fynbos Biome.

We have, until now, been shielded from the greatest threat faced by our biodiversity. That threat is us.

Cape Town serves as a microcosm in which we can see humanity’s global effect, through need or greed, on biodiversity and the natural world. On the Cape Peninsula, competing interests vie daily for scarce resources and survival.

We are destroying our biodiversity through our

- introduction of invasive alien species to the Wildland Urban Interface
- harvesting of fynbos in the formal and informal cut-flower, medicinal and agricultural industries
- pollution of water, land and/or air
- disruption of species dynamics through the decimation of pollinators or dispersers – including long-tongued flies, butterflies and hopliine (scarab or monkey) beetles
- giving some species competitive advantage over others
- aggravation of damage caused by droughts and floods – by way of cutting paths and clearings, informal land transformation and indulging destructive leisure activities
- inadequate response to climate change
- development of infrastructure, crop cultivation, forestry plantations and mines, and
- abuse and misuse of fire.

These factors and behaviours cause or contribute to fynbos habitat disturbance, habitat degradation and, ultimately, habitat loss.

Bearing in mind the words of botanist CL Wicht in 1945, the many decades of research undertaken during the 20th Century, the work of the Fynbos Biome Project between 1977 and 1990 and now-established policies protecting biodiversity from ruinous alien, invasive vegetation, arguing the wisdom of these policies should seem futile.

However, as recently as May 2015, following February’s 5th Wood Conference in Cape Town, afforestation advocates representing European, U.S. and local business interests in the forestry and firefighting industries were lobbying government with the passion of the cigarette and fossil-fuel industries. Their demand? Reverse existing deforestation or ‘forestry exit’ policies whereby fynbos is restored to previously afforested areas.

In May 2014, after a memorandum from the Grabouw Deforestation Crisis Campaign (GDCC), supported by the Grabouw Development Forum (GDF), and the local ratepayers’ association was handed to local authorities, forestry industry advocate and Grabouw Sustainable Development Initiative (GSDI) member, Pieter Silberbauer, warned:

“If the forestry exit strategy is not reversed within 18 months, there will be so little timber to process that remaining sawmills will close. The region will then have also lost the supporting infrastructure such as forest roads, firefighting capability, skilled foresters, education and research.”

In May 2015, the industry’s position was no different. It alleged “sabotage” by “medium-and junior-level bureaucrats” and argued that “in 2008 after the government’s own investigation, it was decided to partially reverse this policy ...”.

Silberbauer argued that the state had “dithered” on reversing its decision to phase out forestry in the Fynbos Biome.

If the state has dithered, it has done so in not accounting for the number of job losses faced by local communities. Nor has it facilitated the reintroduction of fynbos into land exited by the forestry industry.

Nonetheless, in the face of a century of scientific research, the timber industry would be better placed to request a shale-gas drilling concession in the Cape of Good Hope Nature Reserve.

On 12 March 2015, a week after a canopy fire in the Tokai Plantation came extremely close to razing SANParks’ TMNP headquarters at Tokai Manor, Cape Pine put 60 hectares of standing compartments of burnt pine and gum onto the market.



***Fatal attraction** Our continued harvesting of pines may be responsible for 80 percent of the damage caused to property by the Muizenberg Fire. With the blaze jumping Chapman’s Peak Drive, alien vegetation might well account for all damages incurred.*



Were it not for 1995's Working for Water programme, 1998's National Veld and Forest Fire Act, the proclamation of the Cape Peninsula National Park – managed by SANParks – in the same year, the custodianship of our wilderness areas and nature reserves by CapeNature and the Eastern Cape Nature Conservation Board (ECNCB), the work of Ukuvuka: Operation Firestop in the four years following the fires of 2000, the establishment of Working on Fire by the Department of Environmental Affairs and Tourism in 2003, CapeNature's 2003 Biodiversity Stewardship programme (designed to build buffer zones around noncontiguous protected fynbos areas), the development of ecological or biodiversity corridors linking protected areas, the 2004 recognition of the Cape Floral Kingdom Protected Areas as a World Heritage Site by UNESCO, the work of our Fire Protection Associations and SANBI, the adoption by our wildfire firefighting services of the collaborative Incident Command System (ICS), education undertaken by FynbosFire and other organisations, as well as numerous memoranda of agreement between public and private parties at a national, provincial and local level, we (as well-intentioned but ill-informed citizens) might have done far greater harm than we have been allowed to do to our greatest natural assets – Table Mountain, our greater Fynbos Biome and our biodiversity.

We need to educate ourselves and put our exceptionally good intentions and boundless generosity not to expressions of solidarity with entities about which we know little, but to active and purposeful use.

A first step in that direction would be to consider, carefully, what the Muizenberg Fire of March 2015 is able to tell us about our unique Cape Floral Kingdom, our firefighters, and ourselves. Fire is the least of our concerns, but we can do much to address our abuse of it.

Despite an inability to clearly delineate fine-scale habitat units (or distributional ranges) of fynbos – broad-scale patterns are well established – it is known that different areas and species have developed fire regimes allowing for species coexistence, variation and biodiversity. However, no matter how hard SANParks and CapeNature work to preserve this biodiversity, it seems we are determined to undermine their efforts as fast as we are able to disrupt or change these fire regimes.

In the TMNP, Fire Return Rates (intervals between fires in any given area) for fynbos dropped from 31.6 years during the 1970s to 13.5 years between 2000 and 2007. Renosterveld Fire Return Rates dropped from 37.4 years to 17.7 years. Such a revision of rates has an immensely negative effect on fire regimes ensuring the continued biodiversity of the Fynbos Biome.



These figures result from a study of 373 fires larger than a hectare (which burnt some 45,000 hectares) in the TMNP between 1970 and 2007 (including prescribed burns).

The study's findings include

- an increasingly high Fire Return Rate over the years
- an increased number of short-interval fires (or fires occurring after fewer than six years), and
- an increasing number of large (on average, four times larger) short-interval fires.

Wildfires accounted for more than 85 percent of the fires. Of the 373 fires, 45 were prescribed burns (16 of which ran out of control) and six are known to have occurred naturally.

By 2007, we – as Capetonians – had reduced the Fire Return Rate from 31.6 years to 13.5 years. Because these fires were, for the greater part, not caused by natural means or managed, we had drastically changed or skewed long-established fire regimes – leading to a disastrous loss of species and biodiversity.

Three-quarters of TMNP's 28,000 hectares remain unfenced. TMNP is, overwhelmingly, an open-access park attracting the oft-cited figure of well

over four million visitors each year. With its wildfire firefighters attending to approximately 120 fires during the 2014/2015 fire season – of which only a small number constituted prescribed burns, urban development and human encroachment have made it impossible for SANParks officials and contractors to plan and implement prescribed, rotational-burn programmes.

We have, in large part, rendered unworkable the fire-prevention strategy built into the TMNP Fire Management Plan. It seems, therefore, that from the night of 28 February to 1 March 2015, our firefighters were far better prepared for an unplanned fire than were we.

“As hotter and drier conditions become more prevalent, fires burn more often, over more extensive areas, with the concomitant possibility of the fire cycles over larger areas becoming synchronised, which means more populations would be present only as seedlings. This could result in post-fire drought and mass extinction events.”

Professor Guy Midgley,

Department of Botany and Zoology, Stellenbosch University



On the evening of Saturday, 28 February 2015, Muizenberg resident Chris Botha and his partner Sarah planned to celebrate Chris’s birthday with friends atop False Bay’s Muizenberg or St James’ Peak, both of which form their familiar and much-loved backyard and the eastern edge of TMNP’s Central and Silvermine sections.

Months of Cape summer weather, during which the couple had hiked across and camped on the Western Cape mountains, were drawing to a close. Daytime temperatures still rose into the high 30s and, when Cape Town’s notorious southeaster – which blasts the mountains from the southern ocean – allowed it, they spent the long and relatively cool evenings hiking across their neighbourhood peaks.

“We decided against it,” says Chris of their plans for that evening. “The wind picked up and cloud moved in. It would’ve been cold, damp and pretty miserable.”

Damp it may have been, but the dense, fuel-loaded fynbos and grasses above, baked for months by a relentless sun and drained of moisture by howling winds, were tinder dry.

The couple celebrated the evening at home, with friends. Shortly before midnight, on Sunday, 1 March, Sarah – who, in the preceding year, had hiked both fire-ravaged and snow-covered wilderness – noticed “... a red-and-orange corona surrounding St James’ Peak.”

“We knew what it meant,” she recalls. “But, in a way, the reflection of the flames against what were either tendrils of smoke or cloud was strangely beautiful.”



CHAPTER 3

UNDER A RED SKY

“We knew what it meant.”

So too did others. Earlier that evening, Lakeside Fire Station commander Ronald Jacobs had taken and responded to the first known report of a fire. By 21:45, TMNP had fire crews scouring the area in heavy mist – to no avail.

Like a thief in the night, the fire remained hidden for four hours. “Phenomenally strong smell of bushfire and smoke coming over Muizenberg Peak into Westlake area. Is there a mountain fire?” asked Westlake resident Nicky Schmidt of VWS at 23:43 on Twitter.

Sunday, 1 March

Shortly after midnight, VWS tweeted that “the strong smell of bushfire” was “being looked into now” by TMNP firefighting crews before suggesting, at 00:49, that the “huge quantities of smoke” sweeping across Cape Town’s southern suburbs through to Hout Bay on the Atlantic coast originated from fires burning in the Betty’s Bay area, some 50 kilometres southeast, across False Bay.

“Teams watching Peninsula mountains as precaution,” it added – not too reassuringly.

Their TMNP and VWS firefighting crews exhausted after responding to three wildland fires on Saturday, 28 February, it seemed that Cape Town had

been caught napping. However, on locating the blaze raging across the cloud-swept peak 300–400 metres above the sea, the TMNP crews immediately prepared to attack. By 03:00, they were joined by ground crews from VWS and fire crews from the Cape Town Fire and Rescue Services (CTFRS).

At 03:49, a VWS tweet reported that conditions were too dangerous to send in ground crews before first light but, by the time Cape Town awoke to a strong southeasterly wind, a day-time high of well above 30 °C and memories of the great conflagrations of 2000, CTFRS had secured properties on the fire’s perimeter and TMNP Operations Section Chief Clinton Dilgee had sent TMNP and VWS fire crews armed with fire beaters and rake hoes up the left and right flanks of St James’ Peak to do battle on the fireline.

Years of collaboration between CTFRS and TMNP fire-management staff ensured the swift and effortless distinction of separate jurisdictions. Trained to operate in an urban environment, facing myriad different sizes of built-structure and other fire types and specialists in rescue operations, CTFRS are subject to the Fire Brigade Services Act, Act 99 of 1987. Their mandate is to protect life and property on the Wildland Urban Interface.



Wildland firefighting, typically, takes far longer than fighting urban fires and is done over far greater areas. A different, more strategic and tactical skill set is required for managing and suppressing wildfires. The firefighters sent in to fight the raging flames by Operations Section Chief Clinton Dilgee are governed by the National Veld and Forest Fire Act, Act 101 of 1998 and the National Environmental Management Protected Areas Act, Act 57 of 2003.

With firefighters fully engaged and Ou Kaapse Weg – Cape Town’s arterial road to its Deep South – closed, TMNP reported – on Twitter at 08:23 – giving WoF helicopters stationed at TMNP’s Newlands Incident Command Base the go-ahead to water-bomb the inferno now rampaging across the eastern half of the Silvermine section. Heavy cloud obscuring the steep cliffs the helicopters would have to ascend made flight impossible and, for the next two hours, immense sheets of flame – moving swiftly southwest and northwest, fed voraciously on thick, resin-rich fynbos that had not seen fire in 15 years.

At 09:54, using Twitter to inform and calm an increasingly anxious public, VWS reported that poor visibility and turbulence caused by cloud, a strong, gusting wind and dense plumes of smoke made flight too dangerous for the WoF helicopters. However, at 10:38, VWS was able to wish legendary former SAPS and SAAF pilot Willem Hendrik ‘Bees’ Marais – a veteran pilot with more than 10,000 hours aloft under his belt – and fellow airmen Fred Viljoen and John Mittelmeyer “good luck” as they joined “many teams on the scene” to start the first of countless runs between Zandvlei and Peck’s Valley, dropping water onto the fast-moving flames from their 1,000-litre Bambi Buckets.

Double trouble *The Muizenberg mountains seen from the embattled Zandvlei Estuary, fed by the Prinskaasteel River running down Silvermine Ridge.*





By 10:45, VWS had crews “... working from [the] top around over the ridges” of St James, Muizenberg and Steenberg peaks and, from 10:56, began monitoring and containing the fire’s descent down the precipitous northeastern slopes towards Stonehurst Mountain Estate, Westlake and Tokai.

Following the great fires of 15 years before, Capetonians had developed a somewhat blasé attitude to wildland fires and, while many followed the progress of the now 11–12-hour Muizenberg blaze on radio and social media with some interest, most enjoyed their Sundays as normal, believing “this fire” would soon be extinguished.

The fire, which had snuck up on the city in the dead of night to take on a life of its own, had other plans. Nor was the nonchalance of most Capetonians shared by the Cape Peninsula Fire Protection Association, chaired by TMNP’s Incident Commander, Fire Manager Philip Prins, and Westlake residents living beneath the difficult terrain down which the fire was slowly advancing.



By late morning, many homeowners were dousing their properties and surrounding areas with water. Moreover, with the southeaster gaining strength, the WoF helicopters were forced to stand down for close to two hours before, shortly before 14:00, they again resumed water-bombing vegetation surrounding the South African Naval Base beneath Steenberg Peak. Continuing high winds and turbulence meant flare-ups above Muizenberg were left to burn themselves out – a discomfiting situation for firefighters aware that smouldering fynbos is extremely volatile.

By all accounts, it seemed that the fire had been well and truly contained to the eastern half of the Silvermine section and an uneasy truce prevailed through Sunday afternoon.

It was then that the Muizenberg Fire, spread over an 11-kilometre fireline in winds of 70–80 km/h and seeking to further feed its insatiable appetite for destruction, made the first of what became several unpredictable moves.

“We were fighting the left flank above St James and it was back-burning against the wind at about a

metre every two to three minutes, meaning we were struggling to cut containment lines quickly enough,” recalls VWS’s Patrick Ryan, a member of one of the many ground crews fighting the blaze deep in the bush.

“One of our teams witnessed the left flank flare up and run away from them late on the 1st and the speed at which it ran meant there was nothing they could do.”

To the southwest, the fire roared towards Kalk Bay Peak, Clovelly and Fish Hoek. Finding abundant fuel, it advanced swiftly down from the relatively rugged eastern peaks, which rise 300–400 metres above False Bay, to target Ou Kaapse Weg in the northwest.

Behind a billowing screen of smoke, ash and flying embers, the wind gained strength and ferocity and the flames – within two hours – threatened Silvermine section’s western side and completed their descent of the northeastern faces of Steenberg and Wolfberg peaks to surround the Naval Base at Silvermine and gnaw at the fences of Stonehurst Mountain Estate.



The armies of the night During the evening of 1 March 2015, a large wall of flame advanced down Steenberg Peak to confront suburbia’s ordered lattice of light at Stonehurst Mountain Estate.

Despite every attempt by some 200–300 firefighters from TMNP, WoF and VWS – supported by WoF helicopters, the Muizenberg Fire had become an out-of-control, wind and fuel-fed holocaust.

With Monday’s high predicted to be 36 °C accompanied by strong southeasterly winds, all helicopters, bombers and spotter planes grounded, and exhausted fire crews coming off the mountains, the situation looked grim for fresh ground crews sent in to monitor or fight the flames through the night.

Between 21:00 and 21:30, VWS took to Twitter with two ominous tweets. The first read: “As the wind has picked up, the Muizenberg Fire has stood up. There are still teams working lines but it is a big challenge.” The second was a harbinger of things to come: “At this point no property is at risk and resources are stationed along the roads should the fire make it that far.” Their Facebook page noted: “The fire rears its head again as wind speeds pick up. Crews are still working the line. It’s going to be a long, challenging night.”

By 23:00, the wind-driven inferno had become an uncontrollable beast, devouring the fynbos covering the larger part of the mountains. All available firefighting personnel converged on Ou Kaapse Weg to prevent the fire jumping the vital road link.

Monday, 2 March

With Cape Town abed and facing a fresh week, the inferno threw towering walls of fire – on three fronts – at CTFRS and other firefighting agencies’ tenders, pumpers, tankers and skids stationed along Ou Kaapse Weg, brushing off the high-pressure jets of water fired directly at its heart.

Having held their ground through Sunday afternoon and evening, firefighters melted before the onslaught and, according to Tokai resident Ashleigh Gallagher, the fire crossed the road on the Cape Flats side at some time before 01:25, leaving behind it a smouldering, smoking wasteland of skeletal trees and bushes – the roadside littered with bent and twisted Armco guardrails, burnt and blistered signage and the charred and contorted carcasses of small animals.

The road, separating north from south, marks a natural break in the mountains. The terrain to the northwest climbs steeply but far more gently than it does in the east, from 100–300 metres to Noordhoek Peak at 700 metres and, shortly thereafter, Constantiaberg Peak at 900 metres.

One on one Similar scenes played out night and day on Ou Kaapse Weg and Chapman’s Peak Drive as CTFRS found itself unable to prevent the Muizenberg Fire’s advance across the Peninsula’s arterial roads.





Over 24 hours, contained to the Silvermine section's eastern side, the Muizenberg Fire had laid waste to some 1,200 hectares. Over the next five to six hours, fanned by a gale-force southeasterly and facing little resistance in its uphill sprint through the northwestern mountains, it would devastate a further 1,500–1,700 hectares, cause immense damage to property, visit terror on residents to the west and northwest, and bring Capetonians together as never before.

Freed of the peaks, ravines and gullies of the southeast and bypassing the southeastern suburbs of Tokai and Zwaanswyk, the firestorm ripped through the western side of the Silvermine section, devouring its dense vegetation and public boardwalks before, two hours later, at 03:00, it dropped like a 10-kilometre wave of lava from the mountains into the residential areas of Noordhoek, Chapman's Peak and Hout Bay, cutting off all access roads bar Main Road along the False Bay coast.

The four hours before dawn epitomised organised chaos.

With fire teams from TMNP, WoF, VWS and CTFRS using 28 firefighting

and 16 support vehicles to battle the conflagration on several fronts, Noordhoek residents feverishly cut scratchlines within the bounds of their properties and placed water hoses and sprinklers on their roofs as trees, dwarfed by the advancing flames, exploded about them – showering them and their properties with flaming embers, ash and roiling clouds of smoke.

The City's Disaster Risk Management Centre evacuated several hundred residents from the Zilwermyn Village and Noordhoek Manor retirement complexes and 30 homes in the residential areas of San Michel, Noordhaven and Chapman's Peak to three mass-care centres set up in Fish Hoek and Kommetjie.

On the other side of Chapman's Peak – crowned by fire from Noordhoek to Hout Bay's Blackburn Ravine, and with tenders stationed at Hout Bay's Chapman's Peak Drive toll gate – the National Sea Rescue Institute (NSRI) stood offshore as CTFRS personnel tried in vain to save Tintswalo Atlantic Manor, a luxury hotel on the shores of Hout Bay from which the guests had been evacuated at 03:00.



Rain of fire Flame pours down the Constantiaberg to cross Chapman's Peak Drive and raze Tintswalo Atlantic Lodge, visible at lower right.

NSRI Regional Director Brad Geyser was blunt. “Tintswalo is gone,” he said.

Forty-seven-year-old CTFRS commander Frank Forbay was severely injured by an exploding gas cylinder as he fought to keep the flames at bay.

At 07:30, eNCA News asked Lisa Goosen of the Tintswalo Property Group, “Did you have any indication yesterday, when you perhaps first heard of the fire actually starting out in Muizenberg, that your property would even be affected by it?”

Goosen’s reply articulated the view of most Capetonians who, the previous evening, would have laughed at the idea of waking to find the Cape Peninsula cut in two by a broad swathe of fire.

“Not at all. It didn’t even dawn on us that it would come across the mountain quite so fast. But I think, with the winds, it was inevitable.”

When the sun rose above the Helderberg mountains, it was to the inevitable – and a sense of shock and irretrievable loss – that all Capetonians awoke. They had been visited not by a fire, but by some primordial force which, after skulking in the mountains above Muizenberg and Tokai for a day, had embarked on a wild and vindictive dash from Ou Kaapse Weg to inflict as much damage as possible on the communities of Noordhoek and Hout Bay.

On Sunday, most had not been too fazed by the fire but, by Monday, Capetonians and their media exuded a sense of violation and despoliation by some dark and bestial natural force.

Their response, from False Bay to the Atlantic coast, was to rally behind the men and women already putting their lives on the line to fight what had now become a monstrous and vicious outrage. Relief centres, community halls, fire stations and publicised drop-off points were inundated by community members delivering cargoes of food, drink and medical supplies for *their* exhausted firefighters now spread out extremely thinly across a vast area.

When, at first light, four WoF helicopters – joined by a South African National Defence Force (SANDF) Oryx capable of dropping 1,800 litres of water at a time, two fixed-wing bombers able to drop a mix of foam and water and a spotter aircraft – took to the skies to tackle a fire now feeding off dense fynbos over an area of some 3,000 hectares, the aircraft were flown by *their* pilots.





Indifferent by nature The charred remains of a book and the Silvermine section's boardwalks show fire to be a natural force without respect for human memory or utility.

“With many kilometres of active firelines, teams on the mountains are stretched but working systematically to get around the fire,” reported VWS at 09:05.

As tired firefighters with aerial support tackled the flanks of the fire with renewed vigour – the helicopters filling their Bambi Buckets from every available source; from harbours to vleis to dams to decorative ponds to school and residential swimming pools – remorseless nature and the maleficent beast now controlling virtually the entire Central Section of TMNP combined to plot their next move.

While torching the lower slopes of Chapman's Peak far to the southwest and eating their way further along the mountain slopes above Hout Bay, they found greater opportunity at Tokai and Steenberg Estate in the northeast.

At 10:37 and 10:40, residents Gabrielle Boyle and Sasha Watkins reported a “band of pines” at the top of Tokai Forest “lighting up”. In what remained of some of Cape Town's last commercial pine forests, the fire fiend had found a mother lode of tinder-dry fuel and fire-prone invasive alien vegetation on which to gorge itself, and it swiftly attempted to do so.

Dry and carrying far greater fuel loads than fynbos, the alien pines stood to increase the fire's intensity and rate of spread by as much as an order of

magnitude. Alert to the threat, the VWS crew working the area with others from Cape Pine and WoF under TMNP command was immediately reinforced by two further crews. Having contained the fire behind Ou Kaapse Weg through Sunday, the exhausted firefighters were to make another stand that would last more than 36 hours.

Close collaboration among the forces arraigned against the fire required only the occasional clarification of information exchanged on social media on what remained a dangerously fluid situation.

“At this stage the fire is contained but not yet under control. Focus is now on the protection of properties on urban fringe,” the City reported at 13:06.

“What is the source of that message? Some areas still not yet reached by crews,” retorted VWS.

“Hi there. We received this information from the City's Disaster Risk Management unit who are coordinating the response effort,” replied the City at 13:21.

“Our crews are attempting to work along the area above Steenberg Estate. Steep and hot ...” reported VWS less than half-an-hour later to concerned Lakeside resident Carol de Reuck.



No man's land The manicured network of firebreaks built and maintained by members of the CPFPA guards high-priced property in Hout Bay.

At 13:32, a second message was received from Gabrielle Boyle in Steenberg Estate's Zwaanswyk Road. It ended “pls help”. The situation was touch and go but, at 13:36, the only reassurance VWS could give Ms Boyle was, “We have three crews in there, but it's slow going. The firefighting conditions are very dangerous currently ...”

As the second day wore on, the fire appeared – as on the first day – to have gained the upper hand. Early in the afternoon the wind picked up and, well entrenched and continuing to burn in the mountains, it attacked the intricate, neatly manicured network of circum-peninsula firebreaks marking the Wildland Urban Interface with demonic intent. Homes in Noordhoek were again under threat and, by 15:30, flames were speeding towards Chapman's Peak Drive and the Monkey Valley Resort.

In Hout Bay, flames that had been eating their way down and across the Constantiaberg launched an onslaught on Baviaanskloof and Skoorsteenkop, threatening homes in Scott Estate, Penzance Estate and Imizamo Yethu. At 17:10, the Disaster Risk Management Centre, through the Hout Bay Community Policing Forum, put residents living below the densely wooded Baviaanskloof on high alert for evacuation.



With the sun setting and aerial support grounded, rotating fire crews pulled back to the urban fringe faced an uncertain night. Driven by increasingly high winds, the fire spread up, down and along the eastern and western slopes of the Constantiaberg through the evening, tightening its grip on its mountain stronghold.

Tuesday, 3 March

As the clock marked the start of World Wildlife Day, fire tenders lined Chapman's Peak Drive above Noordhoek and Hout Bay, ready to defend the houses and resorts below. At Tokai, fire crews continued to hold their own.

At first light, fixed-wing bombers and helicopters began making repeated runs up the steep face of Constantiaberg Peak. Throughout the morning – on treacherous terrain and under dangerous conditions – fire crews continued to prevent the fire's advance through the fuel-loaded stands of alien vegetation running down the mountainside towards the two suburbs it had bypassed in its frenzied dash across Silvermine's western section.



***Holding the line** With the Muizenberg Fire attacking the Prinskasteel Valley, wildfire firefighting forces make a 36-hour stand at Tokai Plantation's Level 4.*

It was to be a pivotal day, a day of containment rather than suppression, a day during which Capetonians hoped the fire – now inching its way towards the suburbs on all fronts to seek fuel on the mountains’ lower slopes in temperatures that would later reach 36 °C – would burn itself out.

The upmarket Steenberg Golf Estate lies alongside the historic Tokai Manor Estate, which dates back to 1795 and is home to SANParks and the Tokai Arboretum, a national monument laid out in 1885 by Conservator of Forests for the western conservancy of the Cape Colony, Joseph Storr Lister. The Arboretum contains 274 species of tree, including pines, oaks, yellowwoods and eucalyptus trees imported from India, Mexico, Australia and California.

The stately forest of aged trees constituted a bomb waiting to explode.

Above the TMNP wildland firefighting teams loomed Constantiaberg Peak. Constantiaberg itself stretched almost five kilometres north to Vlakkenberg Peak and the end of the TMNP Central Section. A gap in the mountains at

Constantia Nek marked the start of the sharp ascent to the northern face of Table Mountain.

Beneath Constantiaberg lay the affluent suburb of Constantia and the wine farms of Buitenverwachting and Groot Constantia. The latter, established in 1685 by former Cape Governor Simon van der Stel, who came to the Cape from Batavia in 1659, is one of the Cape’s oldest wine farms – producing 400–600 tons of grapes per annum. Its manor house, a national monument and museum owned by Groot Constantia Trust, is managed by Iziko Museums of South Africa.

Confronting perhaps the largest fire they had fought on the Cape Peninsula, such historical facts were not uppermost in the minds of the fire crews. If the forests, Arboretum and houses below concerned them, it was because the fire now burning above them constituted an immediate and direct threat to the Wildland Urban Interface.

In a curious twist, due to a change in the prevailing wind predicted for Wednesday, the fire – having denuded Skoorsteenkop, which juts out into the Hout Bay Valley – reversed course and turned its attention back to the long spine of Constantiaberg and a return to its source. A sharp curve in the fireline shows it sweeping up the mountain north of Constantiaberg Peak in the west to descend on the vineyards, pine forests and heavily treed ravines leading to Vlakkenberg and Constantia Nek in the east.

The change in wind caused dramatic flare-ups. In Hout Bay, the blaze completed its descent to the sea and Disaster Risk Management evacuated No. 1 Chapman’s Peak Drive and sections of the Flora Bay Resort at 22:00. Noordhoek Fire Department Commander Craig Els reported relative calm until embers blown by a sudden, midnight turn in the wind change the situation within half an hour “from very calm to red-hot”.

Wednesday, 4 March

Shortly after 01:00, as homes came under assault from Chapman’s Peak to Clovelly, the wind picked up above Tokai, and the gums and pines of the forests beneath Constantiaberg Peak, stretching from Tokai in the south to the vineyards of Constantia in the north, detonated. Like meteor showers, embers flying hundreds of metres landed in fresh woodland to start, within minutes, raging infernos that appeared, in the dark of night, to attract each other and combine to do the same again.

Capetonians as far afield as the northern suburbs and the Helderberg watched, mesmerised but with increasing apprehension, as brilliant, twisting red, orange and yellow rivers, rings and flickering lakes of fire danced above the vast expanse of the Cape Flats.

Cape Town awoke to scenes redolent of Francis Ford Coppola’s 1979 classic, *Apocalypse Now*. Billowing clouds of brown, grey and ashen smoke filled a sky under which bright orange flames writhed and leapt like snakes or danced like demented shamans. The unmistakeable clatter of Hueys, flying in formation to drop water on the burning forests, filled the stifling air which – later in the day – reached a record high of 42.4 °C, making Cape Town the hottest place on Earth.

None of the 410 firefighters in the field expressed a love of the smell of smoke in the morning.

A large part of the Arboretum was aflame. The historic Wood Owl Cottage on the Tokai Manor Estate had been gutted. Two houses in Almondbury Lane in Zwaanswyk – from where Gabrielle Boyle’s plea for help had come some 36 hours earlier – had been destroyed or razed. A house in Thorpe Close had been badly damaged.

Fire continued to blaze through and consume the forests above the Porter Reform Estate through the morning. Wildfire firefighters could do little and helicopters nothing as fire whirls – fire-induced whirlwinds of flame – rose high into the air, brutal testimony to the turbulent vortices of furnace-hot air sucking in burning vegetation.

As the fires subsided in the forests of Tokai, so the northern section of Constantiaberg caught fire and a four-kilometre wall of flame, sending a plume of smoke far south-southeast into the southern ocean, reared above the Constantia Valley by the end of the day – leading to evacuations from Steenberg Estate in the south to Constantia’s Price Drive in the north, the destruction of a third building among the pines above Buitenverwachting, and the closing of Constantia Nek.

In a last and desperate attempt to find fuel – having already destroyed 5,000 hectares of fynbos across a 95-kilometre front, the incendiary monster marshalled its resources for an attack on the back of Table Mountain.

Explosions in the sky With a firestorm raging above it, Zwaanswyk is caught in a pincer of fire and gardens and houses burst into flame.



Riders on the storm Hueys, such as these flying in formation over Uitkyk farm with 1,000-litre Bambi Buckets, are able to suppress wildfire to a point where ground crews are able to contain or extinguish it.



Fifteen years earlier, on 16 January 2000, the *Cape Times* had reported:

“Residents of Cape Town’s up-market Constantia suburb are among the worst-hit by this week’s fires, with several homes being destroyed on Wednesday.

The Forget-Me-Not florist shop on Belair farm and a two-bedroomed thatched cottage on the property burnt to the ground along with all the contents. Four acres of vegetation were also destroyed.

Owner Joan Pare, who has lived on the farm since 1950, managed to save only a television set and a photo of her husband. She is now staying with a friend in Constantia.

Another house off Belair Drive burnt down. Lots of small fires sprang up and people used sand and water to quell them. Price Drive was lined with rescue vehicles and residents watched the flames surge closer to their houses.

By 5pm on Wednesday at least another three houses in the area were reported destroyed. Some residents had called in furniture removal companies to clear their homes and the huge trucks in the road made it difficult for fire and rescue vehicles to get through.

Radio reports said three mansions below the Eagles Nest area had burnt down. Helicopters spent most of the afternoon water bombing the area.”

Cape Times, 16 January 2000

This time, the combined strength of the Western Cape’s firefighting forces awaited it and, although the raging inferno stripped the eastern slopes of Vlakkenberg Peak and scoured its densely vegetated ravines – at one point coming to within 100 metres of the Groot Constantia Manor House, the assault on Constantia Nek proved to be its last charge.

Having foreseen the Muizenberg Fire’s ambition to leave its mark on history as Cape Town’s largest wildfire, TMNP’s Incident Commander Philip Prins and Section Operations Chief Clinton Dilgee had moved to foil it. Where, in 2000, fire had taken possession of Vlakkenberg before moving down to the Pipe Track to gain a foothold in the alien vegetation on the Wildland Urban Interface, it was stopped atop the western slopes of Vlakkenberg on Wednesday, 4 March by approximately 250 WoF and other firefighters armed with fire beaters.



Full frontal assault With a northwesterly wind behind it, the Muizenberg Fire envelops the Constantiaberg and readies itself for an all-out assault on Table Mountain’s Northern Section.



The WoF firefighters, trucked in from other provinces, were ‘trooped’ – or loaded into helicopters and flown – to Constantia Nek on their arrival at the Newlands Incident Command Base. With helicopters and fixed-wing aircraft water-bombing the western slopes through Tuesday and into Wednesday – before being diverted to the fire that broke out at Cape Point on Wednesday – the fresh firefighters stopped the fire’s descent and avoided a repeat of that which was reported in January 2000.

The firelines around the houses on Price Drive and above Eagle’s Nest were as neatly demarcated as any other line on a map. Foresight, planning and preemption stopped the Muizenberg Fire in its tracks.

Earlier, late on Tuesday evening, to the south and close to the source of the fire, residents in Muizenberg, St James and Kalk Bay were startled to see the flames return and race down to cross Boyes Drive just south of Bailey’s Cottage on Muizenberg’s famed Surfers’ Corner beach.

“I’d pulled the car out onto Main Road and was ready to go. Sarah was packing what she could of our papers,” recalls Chris Botha, whose birthday celebrations had been disrupted by the fire’s outbreak three days earlier.

“It was the sound that I remember most,” says Sarah who, with Chris, had watched as, on Sunday morning, members of the VWS had worked the left flank of St James’ Peak to contain and suppress the head of the blaze. “After four days we’d seen enough of fire but, with it coming to within 200 metres of us, I’ll never forget that sound.”

“We didn’t have to go anywhere,” Chris chimes in. “The guys from CTFRS put it out pretty quickly.”

Having tracked and trailed the fire over their local peaks on Monday evening, coming down by way of a still-blazing Spes Bona Valley, both were appreciative of the work done by the fire services.

“Amazing stuff,” commented Chris. “It could have been so much worse. As it turned out, only a few properties were damaged – which is a tragedy for those who own them – and the fynbos, after 15 years, got a good burn.”

For the exhausted firefighters, though, work continued. Although the City declared the fire under control on Thursday, 5 March, monitoring and mopping-up operations began immediately thereafter and many crews went on to fight the 985-hectare fire that had broken out at Cape Point the previous day.



***Paths of destruction** Forestry levels running between harvested pine compartments home to nascent fynbos growth above Constantia form scars running towards the Muizenberg Fire’s distant source.*



Ring of fire CTFRS firefighters called on to defend the Wildland Urban Interface from a wildfire burning along a 90-kilometre perimeter threw all available resources into the battle.



“[W]e have learnt a lot from the previous fires. We’ll always have fires but people are so much more prepared.”

Sandra Fowkes, Former Campaign Coordinator, Ukuvuka: Operation Firestop

Intuitively, Capetonians knew that, if it weren’t for far-sighted planning by SANParks – collaborating with central, provincial and local government authorities – the Muizenberg Fire of March 2015 might have been far more devastating to the urban environment than were those of January 2000.

Had the conflagration moved to the Northern Section of TMNP and the back of Table Mountain, the city’s densely populated southern suburbs may have sustained catastrophic damage to life and property.

Had the fire caused by a lightning strike in the vicinity of Platboom in the Cape of Good Hope Nature Reserve in the Southern Section of TMNP on Wednesday, 4 March – which consumed a further 985 hectares of fynbos – been allowed to surge beyond Gifkommetjie, Olifantsbos and Bonteberg to cross Plateau Road – separating the Cape of Good Hope Nature Reserve from the mountains dominated by Klaasjagersberg, Swartkop and Simonsberg peaks – Simon’s Town, Scarborough (which experienced a 7.7 hectare fire on 7 March), Red Hill, Ocean View, Kommetjie and other towns making up the Deep South may well have been visited by calamity.

By Thursday, 5 March, as the Muizenberg Fire was brought under control, all Capetonians were willing to entrust their care to our firefighting forces, disaster management and emergency services personnel.

Sandra Fowkes’s above observation was reported in the media at 07:39 on Tuesday, 3 March. A day later, most Capetonians woke to a scene from Hell. The Tokai Plantation had been consumed by a firestorm. Fire crackled within 100 metres of Groot Constantia’s manor house. Residents from Muizenberg to St James to Kalk Bay to Noordhoek and Chapman’s Peak had, less than 12 hours before, been prepared to evacuate their homes.

In the context of its time of publication it was, to say the least, a prescient comment. What made Sandra Fowkes so certain that we were prepared for what was yet to unfold?

What did she know that we did not?



***Pinpoint accuracy** Selective targeting of a wildfire front by an FFA Aviation air tractor in the Boland allows ground crews to move in to suppress the blaze.*



CHAPTER 4

BROTHERS IN ARMS

“It is no exaggeration to say that without the involvement of the CPFPA, its experts and landowners, and the aerial and land-based resources made available for firefighting in the Cape Peninsula, the unique biome that is the Cape Floral Kingdom would have already been damaged beyond the point of no return.”

Graham Barlow, Former General Manager, WoF (Western Cape)

Blunt, but true – a brutal reality with which we wrestled in Chapter 2. We accept and are willing to address it. But what are these entities; the Cape Peninsula Fire Protection Association (CPFPA), its experts and landowners, and the aerial and land-based resources “made available” to us?

We saw urban and wildland firefighters working in concert. We accessed images on social media of helicopters water-bombing walls of flame within metres of groups of firefighters. We watched Cape Town Fire and Rescue Services (CTFRS) personnel, assisted by private-sector security officers, helping elderly evacuees to private-and-public emergency services’ ambulances.

More remarkably, we witnessed numerous ground-based wildfire crews from several different firefighting organisations, including Table Mountain National Park (TMNP), Working on Fire (WoF), Cape Peninsula Environmental Services (CPES), Cape Pine and Volunteer Wildfire Services (VWS), working together like seasoned veterans.

Key TMNP support organisations providing essential services included the City of Cape Town Environmental Resource Management Division, members of the Cape Peninsula Fire Protection Association, Nature Conservation Corporation (NCC) Environmental Services and Enviro Wildfire Services.

Relegated to TMNP’s Newlands Incident Command Base by a torn Achilles tendon, CPFPA General Manager and TMNP Planning Section Chief Pierre Gallagher who, when necessary, stood in for TMNP Incident Commander and Fire Manager Philip Prins or TMNP Operations Section Chief Clinton Dilgee – ensured that landowners within the Park – including the City, the SANDE, Eskom, CapeNature, SANBI, Cape Pine, Public Works and private landowners, remained apprised of the fire’s progress.



Given the non-contiguous nature of some areas within the park, Gallagher's role in liaising with both CPFPA and private landowners to ready their firefighting staff or provide open access to fire crews proved essential to the unhindered flow of firefighting forces for the duration of the Muizenberg Fire.

Compliant and well-prepared CPFPA member properties, including Klein Constantia, Groot Constantia Wine Estates and Tierboskloof Estate, were largely self-reliant as their ability to protect and defend their properties was well-documented and clearly understood. Their preparedness lent additional weight to the many well-trained and fully-equipped resources that ultimately contained and suppressed the blaze.

No single organisation better exemplified the diversity of firefighters than WoF, which called on some 500 firefighters from its 28 bases across Cape Town and the Western Cape

and trucked in a further 250 firefighters – including an all-female crew – from the Eastern Cape, Free State, North West and KwaZulu-Natal provinces.

Above the grimly determined fire crews flew WoF helicopters stationed at TMNP's Newlands Incident Command Base, as well as fixed-wing water bombers and spotter aircraft from as far afield as Stellenbosch. Most had relocated there from bases further afield.

Comparing the Muizenberg Fire of March 2015 to the fires of January 2000, it was quite clear that our firefighting services had undergone a sea change. We were watching a well-rehearsed, seemingly choreographed firefighting effort – firefighting as ballet, if you will.

Capetonians, armed to the eyeballs – literally – with digital-media wear, cameras and access to the Internet might well have asked, “Just who are these people?”



For the answer to that question, we need to return to the prescience of Sandra Fowkes, quoted in the section break preceding this chapter.

In 2003, she – with two colleagues from Ukuvuka: Operation Firestop, Muizenberg Fire Incident Commander and TMNP Fire Manager Philip Prins and the Manager of Fire Services for the Cape Metropolitan Council – coauthored a paper for delivery at the Third International Wildland Fire Conference in Sydney.

The comprehensive paper addressed challenges facing wildfire management along the 100-plus-kilometre TMNP Wildland Urban Interface in the wake of the largest wildfires in recent history, those of January 2000.

Reviewing the history of wildland fire management, the paper acknowledged that consolidating fragmented land into a national park and legislation alone could not prevent or fight those fires. Nor could the release of the TMNP Fire Management Plan immediately thereafter do anything to reverse the damage done by them.

However, the paper presented to conference delegates correctly located the many concrete steps taken towards a national, integrated wildfire-management strategy in the country’s Constitution, “which incorporates principles of cooperative governance by the decentralisation to the local sphere whenever appropriate and possible”.

How was – or is – such cooperative governance achieved in the real world?

The purpose of the National Veld and Forest Fire Act, Act 101 of 1998 “is to prevent and combat veld, forest and mountain fires” and their spread, and to provide the “institutions, methods and practices” to do so.

Pursuing an integrated approach to wildfire management, the institution provided for in the Act is the Fire Protection Association (FPA), a mostly voluntary association of owners cooperating to meet the objectives of the Act. Owners are charged with building and maintaining firebreaks, equipping themselves with appropriately trained personnel and adequate materiel, implementing prescribed burns to reduce high



fuel loads and preserve biodiversity, and fighting wildfires on their or adjacent land whenever or wherever wildfire constitutes a danger to life, property or the environment.

An FPA is presided over by a Fire Protection Officer and is charged with “all aspects of veld fire prevention and firefighting”.

The only bodies obliged to join a registered FPA are owners of state land and entities providing municipal services. Private owners are ‘encouraged’ to do so through the Act’s presumption of negligence clause and other rights-based legislation.

Over four years, Ukuvuka: Operation Firestop, a public/private partnership of which Sandra Fowkes and her colleagues were members, funded and facilitated activities promoting the integrated wildland firefighting and management objectives of the Act. They did so through the standardised incident command and control system set out in the *Table Mountain National Park Fire Management Plan*, published in 2000.

The plan, formulated by the CSIR, was – in large part – informed by the findings of Water Affairs and Forestry Minister Ronnie Kasrils’ Fire Investigation Task Team (FITT), which explored the benefits of integrated wildland firefighting following the 2000 fires. The report’s finding, *A Review of the Veld Fires in the Western Cape during 15 to 25 January 2000*, included rigorous commentary and interrogation by the Cape Metropolitan Council’s Fire Services Manager and TMNP’s Philip Prins.

With Ukuvuka’s objectives achieved, the Cape Peninsula Fire Protection Association (CPFPA) was formed in October 2004. TMNP, the City of Cape Town and other state and private entities were founding members. TMNP Fire Manager Philip Prins became (and remains) the CPFPA’s Chairman and Fire Protection Officer. Pierre Gallagher is the General Manager.

Albeit decentralised, the integrated management of wildland firefighting on the Cape Peninsula was realised in accordance with national government’s development of the Working on Fire (WoF) Expanded Public Works

Programme (EPWP), established in September 2003 in partnership with SANParks and implemented by Kishugu subsidiary, FFA Operations.

Working on Fire Training went on to introduce the Incident Command System (ICS) to South Africa. Funded by USAID's National Integrated Management Systems (NIMS) initiatives, the US Forest Service conducts Multi-Agency Coordination (MAC) training courses for WoF Training and the Western Cape Disaster Management Centre (WCDMC).

Of the successful suppression of the Muizenberg and Cape Point fires, Western Cape Premier Helen Zille wrote on 8 March:

“Learning from international successes, we adopted the Incident Command System – a multi-agency disaster management approach used to great effect in the United States. It allows personnel, facilities and equipment from various different agencies to be integrated into a common organisational structure.”

Muizenberg Fire Incident Commander and CTFRS Chief Fire Officer Ian Schnetler, noted:

“[O]n this occasion, every agency knew what its function was. ICS enabled us to put operational requirements in place quickly, without which you risk having chaos. We had to work a lot on instinct in 2000 but, this time, we received quality communications from all agencies on the ground and we had a comprehensive overview of what was happening. This made operational decision-making much easier.”

It seemed, in the wake of the Muizenberg, Cape Point, Scarborough and the 18 other fires that simultaneously ravaged the Western Cape, that our goal of a collaborative and integrated approach to wildfire prevention, protection, suppression and recovery had been achieved.

Much unlike during the fires of 2000, in 2015 Capetonians and the world were able to see, smell, photograph, record and broadcast events as they unfolded. We were not only watching on-the-ground cooperation and collaboration; we were seeing the successful implementation of the much-vaunted ICS.

However, appearances and proclamations can be deceptive and it is, again, to those with knowledge and experience we must turn – in this instance, Sandra Fowkes. If it is true that wisdom – born of such knowledge and experience – can articulate more in a sentence than the most informative publication or academic paper, then we must take note of her second sentence:

“We’ll always have fires but people are so much more prepared.”

The meaning of her first point is self-evident, but her second less so. Carefully read, it indicates progress rather than perfection.

In the preceding paragraphs, both CPFPA Fire Protection Officer and TMNP Fire Manager Philip Prins and CTFRS Chief Fire Officer Ian Schnetler are referred to as “Incident Commander”. In terms of the National Veld and Forest Fire Act, Act 101 of 1998 and the ICS itself, it would seem that allowance is made for only one Incident Commander.



We must therefore ask, “Why were two so frequently cited?”

Although the Muizenberg Fire crossed Ou Kaapse Weg (which bisects the Central Section of TMNP) in the early hours of Monday, 2 March, CTFRS Chief Fire Officer Schnetler launched a full-scale Type 2 Incident Command System on Sunday, 1 March and, as the City's Incident Commander, established an Incident Command Post (ICP) at Lakeside Fire Station.

Incident types range from Type 1, requiring a national response, to Type 5, which can be handled by six people using one or two resources. A Type 2 incident is defined as extending beyond the capabilities for local control, requiring the aid of provincial and national resources. Such an incident requires written Incident Action Plans (IAPs) for each operational period.

It differs from a Type 3 incident in that a Type 3 incident does not extend beyond capabilities for local control.

More important to journalists and the public, it appears that – with the fire crossing Ou Kaapse Weg, the City took advantage of the situation to assume management of a wildfire within TMNP limits and went on to maintain a Type 2 presence until Friday, 6 March. Despite this assumption, SANParks' TMNP Incident Management Team would, over succeeding days, lead the firefighting effort with WoF and VWS assistance from its TMNP Incident Command Base at Newlands.





Interviewed by *Fire and Rescue International*, City Incident Commander Schnetler explains his decision:

“In terms of the overall position, this was essentially a fire on SANParks’ land. However, the overall responsibility for fires within the city boundaries rests with the City and its fire and rescue service. In terms of the threat to the urban edge, on a number of

days during the fire, the damage to property had to be averted and, as such, the City took command of the incident in conjunction with the TMNP. In truth, there was a split in the command structures as a representative from TMNP was not always in the command post, nor at the DOC [Disaster Operation Centre].”

In terms of the legislation governing such events, his role as Fire Protection Officer of the Cape Peninsula Fire Protection Association and as a representative of state land, Prins discounted any notion of “a split in the command structures”.

“We established a Unified Command, whereby the ICP was established at Lakeside and the Incident Command Base at Newlands. An Incident Command Base is a distinct entity. It’s where most of the support activities report to and from where they’re dispatched.”

“There was no ‘split’ in the command as we worked extremely well together. Each morning, for the duration of the fire, we jointly established and confirmed the goals and objectives and operational plan for the day.”

“The only problem was that due to a shortage of dedicated Fire Management staff, neither Clinton Dilgee nor I could afford to spend the day at the ICP as we were actively engaged at all stages of the fire.”

Unified Command, or UC, is an integral part of the Incident Command System, allowing all responsible agencies to share in the decision-making process. Under Unified Command, a single Incident Command Post is established, the incident is subject to a single, coordinated IAP, and responsibility for implementing the IAP falls on the shoulders of the Operations Sections Chief – in this case, TMNP’s Clinton Dilgee.

Speaking to *Fire and Rescue International*, Prins noted:

“There is still a lot to learn regarding Unified Command. As a landowner, we find the Incident Command System very beneficial. It levels the playing field as far as separate ‘kingdoms’ are concerned. Due to the location of the WoF dispatch centre at the Newlands Fire Base, which was essentially responsible for the dispatching of all aerial resources and ground crews except for the CoCT Fire and Rescue Services, it can be questioned whether the location of the IC centre at Lakeside was the right decision.”

No matter minor disagreement at management or any other level, it appears all parties accommodated each other. Using shared organisational structures, communications, terminology, equipment, operational and safety procedures, they did so under public scrutiny with precision and ease. If our firefighters appeared to speak a common language, it is because they did so.

On Wednesday, a day after publication of Sandra Fowkes’s comment, with the Tokai Plantation a smoking ruin and the blaze thundering off in the direction of Constantia Nek, National Director of Natural Resources Dr Christo Marais noted:

“It [the 2000 fire] was also the birth of the Ukuvuka campaign, which ultimately led to the establishment of Working on Fire. I think today we’re much more prepared for these disastrous fires with Working on Fire – the collaboration between the City, South African National Parks and the Working on Fire programme through the Department of Environmental Affairs.”

24/7 Whether at work, on watch or at rest, VWS wildfire firefighters maintain a state of constant readiness wherever their services are required.





In hindsight, it appears there were many people infinitely better-informed than were we.

However, watching Hueys bearing Bambi Buckets clattering overhead in formation as fire whirls twisted hundreds of metres into the air, fixed-wing bombers flying in low to drop plumes of water and foam before twisting up to turn against the faces of jagged and ancient cliff faces, and trees exploding under a rage-red sky that itself seemed afire, we could be forgiven for taking some time to appreciate the prescience of Sandra Fowkes's words.

Nevertheless, within days, we were all able to say:

“We’ll always have fires but people are so much more prepared.”

Over the top Wildfire firefighters equipped with ‘knapsacks’ – hand-operated water pumps with a capacity of 15 to 20 litres – recall images of WWI trench warfare as they move in to do battle with the raging wildfire.



Coming off a 12-hour shift after three days of firefighting, and having just withdrawn crews from the fireline, I used only seasoned firefighters to help homeowners evacuate. We used our siren and homeowners' doorbells to alert residents.

It was an intense and surreal environment in which to operate. Their gardens on fire and their suburb shrouded in smoke, people were loading pets and valuables into cars and leaving under a rain of burning embers. We rounded up several

horses and led them to safety, helped an elderly lady and her cat evacuate through her burning garden and guided several people out of the area.

My toughest moment was finding an elderly man, severely traumatised and confused, standing in the road with tears in his eyes. Dressed only in shorts and a T-shirt, he had evacuated with his wife and driven down the road – before returning on foot to find his beloved cat.

He was lost and struggling to find his home. Loading him into the safety of the car, we managed to locate his address. The dense vegetation surrounding the house was ablaze. Assessing the situation, I planned routes enabling a swift entry and fast exit, and a colleague and I double-checked that our protective gear was fitted correctly.

Entering the building, we began a quick room-to-room search for the couple's cat. After scanning the first room, my colleague went on to search a second while I checked our escape route which, as it turned out, was fast being cut off by flames rippling under and consuming the verandah roof. I alerted my colleague and, holding our breath, we exited through a tunnel of fire formed by burning rafters above us and bushes beside us.

Having done all we could, but saddened at not having found the cat, we climbed into the vehicle and escaped the inferno raging behind us. Worse, driving the homeowner back to his car where his wife was waiting for him, we knew he had lost not only his cat, but all his worldly possessions.

Nothing was said.

Briefly catching the gaze of the stunned homeowner, we shared a moment of utter helplessness.

The following day, we surveyed the remains of his razed home. I still wish we could have done more.

Ryan Heydenrych
Wildland firefighter



The day after Following the shock of losing his still-smouldering Zwaanswyk home, a distraught Geoffrey Collings leaves Almondbury Lane forever.



CHAPTER 5

BREACHING THE DIVIDE

“Wildland Urban Interface neighbourhoods are social systems ... Failure to work with the social system will probably doom efforts to promote fire hazard mitigation.”

Third International Wildland Fire Conference, Sydney 2003

Nowhere is Cape Town’s Wildland Urban Interface more pronounced than at Zwaanswyk, an unashamedly opulent suburb lying in the densely wooded Prinskasteel Valley at the foot of the steep northeastern flank of Steenberg Ridge, which rises to 530 metres.

Between Steenberg Ridge and Constantiaberg lies a relatively flat, featureless saddle of scrubland – rising only 100 metres to 600 metres over close on one-and-a-half kilometres from southeast to northwest. Constantiaberg Peak towers 300 metres above its northern side. On its northwestern side, the saddle plunges down Constantiaberg’s Blackburn Ravine into the Atlantic Ocean beneath Chapman’s Peak Drive and the entrance of Tintswalo Atlantic Manor, a luxury resort midway between Hout Bay and Chapman’s Peak.

On Monday, 2 March, the fire that had jumped Ou Kaapse Weg to the south and southeast of Lakeside, Westlake and Zwaanswyk, raced five kilometres northwest to descend Constantiaberg’s western cliffs and raze Tintswalo Atlantic Manor shortly before dawn.

By late morning on Tuesday, 3 March, the gale-force southeasterly wind driving the fire became a northwester. The fire reversed its course and, hell-bent on testing every aspect of TMNP’s Fire Management Plan and related entities’ US-designed Incident Command System (ICS), turned to find fresh fuel at Hout Bay, Noordhoek, Clovelly and Tokai.



Some 300–400 metres below and stretching just over one-and-a-half kilometres beyond the still-burning Constantiaberg saddle and Steenberg Ridge, lie the alien pines (*Pinus pinaster* and *Pinus radiata*) and gums (*Eucalyptus saligna*) of the former Tokai State Forest plantation.

The remaining pine compartments, separated by forestry roads or levels – of which Level 5 is at the highest elevation, are harvested by Cape Pine in terms of a 20-year lease agreement struck in 2004 between DWAF and MTO Forestry.



Pines – a particularly pernicious form of fire-adapted invasive alien vegetation – when burnt, immediately and dramatically raise the intensity of a wildfire. The increase in intensity, by up to ten times that of fynbos, is so rapid that liquids and gases in the bark-covered trunk of individual trees start to boil or are vapourised. The tree immediately becomes a pressure cooker lacking a release valve – and explodes.

The intense heat generated by burning pines and gums requires that they be treated before burning to prevent the soil around them being sterilised.

Beneath the mosaic of harvested and yet-to-be-harvested ‘same-age’ pine compartments lie the Tokai Arboretum, the headquarters of SANParks at Tokai Manor Estate, Zwaanswyk and, along the latter’s perimeter, the clearly demarcated urban edge.

The demarcation separates Cape Town’s sprawling built environment from the unique ecosystem that forms the Cape Peninsula Protected Natural Environment (CPPNE), established in 1997. The SANParks-managed TMNP, proclaimed as the Cape Peninsula National Park in 1998 with a view to acquiring all privately owned land falling within the CPPNE and restoring its fynbos vegetation, lies within or on its urban boundaries.



THE BATTLE FOR TOKAI

With the change in wind direction, TMNP Incident Commander Philip Prins and Operations Section Chief Clinton Dilgee swiftly deployed already exhausted WoF, TMNP, VWS and Cape Pine forces – that had been standing their ground for 18 hours – to lines on Tokai Plantation’s Level 4 to counter a frontal attack by the fire.

Retaining a number of TMNP wildland firefighters around the Tokai Manor Precinct to the north, they positioned VWS and Cape Pine fire crews to the south where the blaze was advancing down Steenberg Ridge.

With the increasingly ravenous holocaust raging before the wind, a battle to prevent the Wildland Urban Interface being breached lay ahead – a battle that would last a further 18 hours and would be won or lost over fewer than 1,000 metres of steep and dangerous terrain rising some 300 metres from the valley floor.

The dry but fuel-laden pines atop Prinskasteel Valley’s Level 5 cracked and exploded with the sound and force of bombs. Pillars of flame, burning embers and ash leapt hundreds of metres skyward and, under a burgeoning plume of multihued smoke, the Muizenberg Fire began its assault on Prinskasteel Valley, Zwaanswyk, Tokai and the greater Constantia Valley.

By midmorning, the first stands of pines beneath the saddle disappeared into a raging maelstrom of fire and smoke but, by late afternoon, TMNP, VWS, Cape Pine and WoF fire crews were holding their own on Level 4, dousing spot fires caused lower down by burning embers, and setting back burns to consume fuel the fire might feed on.

If frustrated, the fire beast was not deterred. It made better progress on the cleared slopes of Steenberg Ridge where, shortly after 16:00, it jumped Level 2 and made a run for the suburb of Zwaanswyk. An hour later, noting fire whirls and a large rotating plume of smoke, the crew boss overseeing and supervising the VWS and Cape Pine crews holding the line some 300 metres from and 75 metres above Zwaanswyk, requested aerial water-bombing support from TMNP Operations Section Chief Dilgee.

Within half an hour, WoF Aviation helicopters were making runs along the southwestern perimeter of Zwaanswyk and the TMNP Operations Section Chief took command of the area. The strengthened VWS fire crews, using a TMNP skid (a self-contained firefighting unit fixed to the back of a small truck or bakkie) sprayed, beat and rake-hoed fires breaking out rapidly among stacks of cleared vegetation.

As darkness fell, so too did the wind and, with more firefighters and a VWS skid joining them, the fire crews began the long and arduous job of mopping up above Zwaanswyk. Some seven hours later, at close to 01:00 on 4 March 2015, the supervising crew boss estimated that it would take 45 minutes and three skids of water to suppress the fire.



Dog tired Working up to 18 hours a shift at Tokai, VWS crew members took any break available to them.



Descent into Hell TMNP firefighting contractors try to stall the inevitable deep in the volatile heart of the forests.



***Withdrawal** VWS firefighters withdrew from their positions before the Tokai Plantation blew up, avoiding a situation similar to that in which they found themselves at Slanghoek in 2010.*



FIRESTORM

Fifteen minutes later, a strong gust of wind swept through the Prinskasteel Valley and fire crews posted lookouts.

The gust of wind was followed by another and yet another.

Within half an hour of the first gust, the fire beast roared and crews were enveloped in a swirling cloud of embers that reduced visibility to zero. A choking cloud of darting, floating sparks, cinders and ash mocked the attempts of those who had, for three days, sought to suppress a conflagration that had already consumed approximately 4,000 hectares of fynbos and was now attacking the Wildland Urban Interface on three fronts.

Seasoned supervisors, crew bosses and firefighters are inured to such antics. When the fire dance subsided, the VWS supervising crew bosses assessed the situation. Fires flared above, below and around the wildland firefighters. They stretched as far as the edge of the firebreak surrounding Zwaanswyk, the suburb they had laboured to protect. Worse, a plethora of spot fires had broken out in the gums of the Tokai Plantation.



The Prinskasteel Valley was alight and looked set to blow up. TMNP Operations Section Chief Clinton Dilgee was immediately consulted and, with discipline honed by experience, the crew bosses and firefighters beneath Silvermine Ridge swiftly gathered their vehicles and equipment. Half an hour later, buffeted by violent fire whirls, they withdrew from the fireline.

Reaching the western edge of Zwaanswyk just after 02:00, VWS members that had spent at least 12 hours in extreme conditions subject to vast fluctuations in temperature, limited oxygen and a surfeit of smoke, looked back on the wildland they had vacated. The area in which they had been working was ablaze; fire and dust whirls raged about them, the forests bounding the suburb's northern perimeter were afire and flaming embers were raining down on Zwaanswyk.

The Tokai Plantation, its canopy engulfed in flame, had transmogrified into a blinding glow. Much like a volcano, it had erupted to spew fire, ash and embers in every direction.



EVACUATION

It was apparent to the VWS firefighters that they and the residents of Zwaanswyk faced not only a firestorm; they were in danger of being encircled. Following the TMNP Operations Section Chief’s radioed instructions, the VWS crew boss gathered his lieutenants and briefed them on alerting residents on their need to evacuate.

Six minutes after reaching their staging area and accounting for all their members, VWS fire crews – their available sirens wailing and their members ringing doorbells – fanned out into the suburb to urge residents to escape potential catastrophe. Subject to swirling eddies and vortices of super-heated gasses, residential gardens around them were spontaneously combusting.

They were to continue their task for two hours.

Barely half an hour later, when built structures started bursting into flame, a call for assistance was put through to the CTFRS Incident Command Post at Lakeside, ten kilometres away.

At approximately 03:00, some 400 metres from where the fire crews withdrawing from beneath Steenberg Ridge had proceeded to prompt residents to evacuate, Gerard O’Brien – having spent the previous afternoon and evening with his wife Dee, other family members and a large group of friends fighting the fire while readying to vacate his business on the westernmost edge of Zwaanswyk, bordering the National Park – climbed into his car.

Following more than 20 people who had assisted the couple, he left the driveway of his family business for what he believed might be the last time. What was approaching the large, double-storey building was likened by one of the group, Desireé Summers, to “a tsunami of fire”.

In his headlights, Gerard O’Brien caught sight of an elderly gentleman standing in the road. It was his neighbour, Geoffrey Collings. Without second thought, O’Brien stopped his car and queried his bewildered neighbour’s presence in the roadway. The octogenarian replied that he had lost his keys. O’Brien immediately enquired about the whereabouts of his wife, Francis Collings. She was inside the house, replied his traumatised neighbour.

Gerard O’Brien’s friends and family members, wondering why he had pulled up, stopped their cars further down the road. Hurriedly indicating that he needed help, O’Brien dashed into the Collings’ property, the heavily vegetated garden of which was aflame. Joined immediately by his friend Clint Arendse, he kicked down the front door of the Collings’ residence and, after locating Fran Collings and her husband’s keys, he and Arendse helped the couple into their car and urged them to drive out of Zwaanswyk.

It was only after rescuing his neighbours, whose house was shortly to be razed by the swiftly advancing flames, that Gerard O’Brien left the area.



At 03:45, having rescued an elderly resident from her home next to the old reservoir at which they had gathered an hour and forty-four minutes earlier, VWS firefighters alerted their colleagues prompting evacuation that the exit to the suburb was in danger of being cut off by the advancing flames.

As CTFRS fire trucks, accompanied by a 12,000-litre all-terrain behemoth of a tender capable of speeds of 140 km/h from the Airports Company of South Africa (ACSA), arrived at the foot of the suburb, the VWS supervising crew boss pulled his firefighters back to a designated safe point, conducted a headcount and drew up lists of members still urging residents to evacuate.

Two of them were VWS volunteer firefighters Ryan Heydenrych and Mike Boyd, who discovered that the Collings couple – after leaving their home on their neighbour's instructions – had stopped their car on Zwaanswyk Road. Geoffrey Collings had returned to search for the couple's beloved cat

and was standing, apparently confused, in the road. The house was ablaze and hedgerows either side of the narrow thoroughfare were spontaneously bursting into flame.

As Ryan Heydenrych writes at the beginning of this chapter, it was into this volatile Hell broth of smoke, ash, embers and vortices of highly combustible, super-heated pockets of swirling gas that he and Mike Boyd ran in a last-ditch attempt to find the elderly couple's pet.

Sadly, unlike Geoffrey Collings' set of keys – located earlier – the cat was not found. Happily, the confusion of cataclysm makes room for error. Fran and Geoffrey Collings were caring for two cats at the time of the fire. A neighbour reported that one of them was found. Such a result can be viewed in much the same light as the Muizenberg Fire itself – that is, as something of a mixed blessing.

IN THE LINE OF FIRE

For the next three and a half hours, Ryan Heydenrych and a crew of five experienced VWS firefighters aboard a skid vehicle joined TMNP Operations Section Chief Clinton Dilgee and other TMNP firefighters in saving the historic Tokai Manor Precinct, which had already lost the historic Wood Owl Guest Cottage in the Arboretum to the fire, from further damage. After helping to secure TMNP’s thatched buildings, Heydenrych was relieved at 07:35, having spent 18 hours fighting the blaze.

Driven by a strong northwesterly wind, the firestorm had ripped through the plantation’s canopy, turning the resin-rich foliage into a brilliant torch visible the length and breadth of the Cape Peninsula.

Its primary victims were members of the Tokai baboon troop, sleeping in the trees above Level 1.

Across the Peninsula, people and animals alike suffered the breach of the Wildland Urban Interface by the mammoth fire.

In Cape Town’s southern suburbs, several kilometres from the fire at Tokai, outgoing Wynberg Boys High School Headmaster Keith Richardson and his wife, Pippa, were awakened by phone calls and messages shortly before 02:00 informing them that the home in Noordhoek to which they were hoping to retire at year’s end, was ablaze.

Later that day, harassed by reporters while sifting through the remains of a home dating back 150 years – approximately the same age as the school to which her husband had dedicated 17 years as headmaster – Pippa Richardson voiced the thoughts of many. “I just don’t want to talk right now, I can’t, I just can’t,” she said.

With their home located well over 300 metres from the fire’s edge in an established suburb and surrounded by properties boasting dangerously thick stands of alien vegetation, the Richardsons had every right to feel, in some way, singled out.

And yet, the dynamics of fire and their and the preceding owners’ desire to maintain the historic nature of their home made it an obvious target for destruction. The house’s thatched roof fell victim to spotting, whereby an ember – thrown or blown hundreds of metres from the main fire – seeks to extend its spread.

Capetonians needed and were given a breather. Five days later, in a detailed description of the day, Keith Richardson placed on record the resilience, stoicism and humour of Capetonians who had undergone the trauma of losing – or nearly losing – their homes to the fire.

“A book belonging to our tenants was discovered in the ashes - charred, wet and bedraggled. The title: ‘Don’t Sweat the Small Stuff’ radiated defiantly from its cover as it lay amongst the carnage.”

“I took heed of the message.”





A simple twist of fate Diana and Robert Williams lost their Zwaanswyk home after it was set alight by a rain of burning embers and damaged beyond repair.

AFTER THE STORM

When Gerard O’Brien, who had rescued his neighbour Fran Collings from her home and, in all likelihood, a fiery death, returned to his business at the westernmost edge of Zwaanswyk, he found that his neighbours’ homes had been damaged, gutted or razed.

Neighbour Diana Williams told the media, “We lost everything; our business, our income, our home – everything.”

Diana and her husband Robert, who rented out an exclusive cottage and made ice cream at their home, were not insured.

“We made the furniture by hand,” said Williams. “It’s also gone.”

Against probability and the odds, the O’Brien’s business had escaped the firestorm unscathed.

In a video clip reviewing the economic and ecological impacts of the wildfire on Tokai, a relative’s relief is palpable.

“I didn’t know what we’d find,” she recalls. “But then, as we were coming up to the house, I saw the house standing intact. My knees went weak. I can’t explain the feeling – I was so weak, but there was such a sense of gratitude. I don’t know how one describes a miracle, but some miracle had happened in our lives.”

Satellite images of the Tokai Manor Precinct and Zwaanswyk show that, had it not been for the successful implementation of the *Table Mountain National Park Fire Management Plan* and the gradual clearing of alien pines and gums from the old Tokai State Forest in the years following the fires of 2000, the suburb of Zwaanswyk, and perhaps others, may well have been destroyed.

By the end of June, Dawn Bloch of Lew Geffen Sotheby’s International Realty in Zwaanswyk had sold the Collings’ property in Almondbury Lane.

“In spite of the trauma they experienced, Geoffrey and Francis Collings are very well and, assisted by friends and Zwaanswyk residents, are now settling into a nearby retirement village,” she said.

Bloch donated 10 percent of her commission from the sale of the Collings’ home to the Cape of Good Hope (CoGH) SPCA’s Wildlife Unit.

The unassuming yet outgoing nature of the man who watches over a planetary icon in whose rocks prehistory may be seen and revisited, TMNP Park Manager Paddy Gordon, belies a personality able to articulate the mystery and wonder of those first days of March.

Months after the unrelenting, thankless task of restoration started, the eyes of the curator of a heritage older than life itself grew both misty and bright with hope as he recalled relocating his office to the TMNP Incident Command Base at Newlands.

He speaks in animated awe and an eloquence born of wonder about a phenomenon as mysterious as the 25,000-hectare mountain itself; a profound and fundamental groundswell of support by Capetonians, South Africans and people around the world, acting in concert across all social and economic divides, for ... what?

He stops speaking, his eyes either searching for an answer or trying to grasp the enormity of the true miracle of those days of fire.

It was as if each Capetonian, each South African, each person who has ever considered the central role played in the life of the city by TMNP, had stepped forward – one by one and each with a stone in hand (in the form of a bottle of saline eye drops, a can of dog food, or a financial donation) – to state:

“If this mountain goes, we will rebuild it ... one rock at a time.”

During the first week of March 2015, Capetonians fought for the soul of Table Mountain, and became one with it. Months later, the eyes of the man charged with overseeing our natural heritage are still searching, still gazing at an incessant flow of donations of food, energy drinks and bars, water, medical supplies, wet wipes, birthday cakes, gloves, clothing, goggles and other markers of support that – no matter how quickly they were distributed along the fireline or put into storage – continued to fill every firefighting organisation’s Incident Command Post to its ceiling.

It was a time in which Capetonians united not only with each other, but with the mountain that makes them Capetonians.

In the 17 years of its existence, TMNP has made significant quantifiable and non-quantifiable hard and soft-core socioeconomic contributions to the local and regional economies and communities through

- tourism
- social and economic opportunities
- conservation and education
- income and job creation
- increased productivity by way of deduplication
- reducing income inequality
- improving the business environment
- promoting the city, and
- attracting funding from national government.

Today, it makes an increasingly meaningful and measurable contribution to our GDP.



*Cape Town rising Through the smoke, fire, loss and despair
shone a light greater than any natural catastrophe.*



CHAPTER 6

LIKE MOTHS TO A FLAME

“In my 35 years of firefighting, I have not witnessed appreciation on such a scale. It has left me searching for words and I must, in this instance, borrow those of a colleague from another province: ‘This could only happen in Cape Town.’”

Philip Prins, Fire Manager: Table Mountain National Park

Three hours after the clock marked Monday, 2 March, wildly gyrating dragons of flame; twisting, contorting – randomly appearing and disappearing here, there, everywhere – and barely covered by a dense swirling shroud of acrid, suffocating smoke driven by a howling southeasterly, showered burning embers, fiery cinders and still-burning vegetation into and onto suburban gardens and rooftops in the Noordhoek Valley suburbs of San Michel, Noordhaven, Goedehoop Estate, Chapman’s Peak Estate and Chapman’s Peak.

Roaring through the crackling fynbos and exploding trees lining the slopes above San Michel, the advancing inferno threatened to engulf the Noordhoek Manor and Zilwermyrn Village retirement complexes and their frail-care centres.

With Ou Kaapse Weg, Boyes Drive and Chapman’s Peak Drive closed and an overturned truck blocking Hout Bay’s Main Road following a fatal accident, the residents of Cape Town’s Deep South, assisted by fire and emergency services, could access Cape Town only by way of the Main Road running along the False Bay coast.

Five houses in the area soon fell prey to the advancing inferno, suffering damage.

The City’s Disaster Management Centre decided to evacuate the retirement villages as well as 30 homes in Noordhaven and the heavily treed De Goede Hoop Estate beneath Noordhoek and Chapman’s peaks.

Waiting family members, CTFRS personnel and private paramedics immediately assisted in moving nearly 500 aged and other residents to mass-care centres at Fish Hoek's Dutch Reformed Church and Community Hall, as well as the Noordhoek Dutch Reformed Campsite.

Fifty-two residents in frail care at Noordhoek Manor and Zilwermyn Village were transported by ambulance to an old-age home in Fish Hoek where they were treated for smoke inhalation.

Needing no prompting, Noordhoek residents Gavin Fish and Athos Rushovich opened the Dutch Reformed Church Hall and, using the Noordhoek Community Forum Facebook page and Twitter, sent out a call for volunteers to the Noordhoek community, members of which arrived in numbers to help set up a disaster-relief centre.

"In 2000 there was a fire control centre here, so we just went there and because we were first, we kind of found ourselves coordinating everyone. It was amazing how everyone came to help," Rushovich told reporters.

Occasionally, the terse prose of reportage best captures the spirit of disaster and the resulting sense of community. Such a report, by Melanie Gosling, Carlo Petersen and Aly Verbaan, appeared in the *Cape Times* on the morning of Tuesday, 3 March.

The local Friendly Store opened in the dark and people bought food, water and fruit juice to distribute to the firefighters and anyone who needed it ...

Ben Fish, Gavin's son, walked into the centre with a chain saw. He had been cutting down trees around houses in the dark, helped by a visitor from Berlin, here to do the Cape Town Cycle Tour next weekend.

"The fire was about 50 m away from one property so we cut down those big trees to make a barrier. We cut about 10 or 11 trees. If the fire gets into the trees, it spreads to the houses very quickly," Ben Fish said.

Simon Struben, his face and clothes streaked with smoke, said he had worked with buckets and spades to keep the fire away from a neighbour's house.

"The neighbour was away, so we spent half the night watering his roof and mine. But the fire burnt the PVC water pipes," he said.

Cape Times, 3 March 2015

Shelter from the storm Shona Bettison (right) visits her mother-in-law, 90-year-old Dorothy Bettison (centre), and 90-year-old Wendy Edgar (left) of Noordhoek Manor after their evacuation by CTFRS to the Dutch Reformed Church in Fish Hoek. Both ladies were able to return home later the same day.





In the chaos of catastrophe, established media houses with reporters on the ground proved reliable – and those with an online presence used innovative applications to communicate events as they unfolded. However, media houses, TV stations, radio broadcasters and websites that have long used social media to good effect – a communications technology not available during the great fires of 2000 – proved themselves to be ahead of the curve.

If the Muizenberg Fire of 2015 did more than destroy houses and other built structures, it exposed the shortcomings of the single-source journalism favoured by unwieldy institutions using spokespeople to communicate a ‘unified’, sometimes incorrect narrative to the public.

Relied on by media further afield, such information led to a Gauteng-based newspaper citing “Cape Town Disaster Risk Management” as the authoritative source behind its erroneous report on 2 March of four houses having been destroyed and three old-age homes evacuated in Muizenberg.

Whether the availability and immediacy of social media helps or hinders large-scale disaster management has yet to be decided. What is indisputable is that the ubiquity of data sometimes leads to information being lost.

You’ve probably not heard of 4CCharity. They probably don’t mind. They weren’t looking for our attention. They merely wanted to make a difference. And they did. An image on Twitter of a motor vehicle piled high with “Our contribution to firefighters. Eyegene, buckets, Panados & Tab cool drinks. To TEARS lots of dog and cat food” says infinitely more of ‘those that have’ than can any number of words.

Leading the way on the donations front, those who thought they had – including 10-year-old Callum and a group of children from Masiphumelele – gave their pocket money to the firefighting effort and spurred other children to do the same. Those who believed they did not have, such as three-year-old Bella Venter of Fish Hoek, volunteered their labour.

If Capetonians opened their hearts to those fighting the Muizenberg and other fires raging throughout the Western Cape, they opened their doors to each other. Civic associations, community support forums, businesses, neighbourhood watches, private emergency rescue services, faith-based and religious organisations and community policing forums swamped private, civic and public-utility buildings to initiate a massive, self-organising and logistically complex disaster-relief effort supporting evacuees, those who’d suffered damage or injury, homeowners threatened by fire, domestic and wild animals and the firefighters themselves.

With their presence made known immediately through web-based publications and social media, what had been impossible 15 years before was now the common-sense thing to do, and Capetonians – mindful of, but not reliant on, officialdom – did it without fear, fuss or favour and, importantly, with good humour.

Kyle Fourie of Stonehurst Mountain Estate who, with his wife, evacuated on the precautionary advice of estate management rather than awaiting instruction from the fire authorities, voiced what would become a humorous dig at males’ affinity for their sporting equipment:

“We took anything we could take. The other stuff is insured. I also took my bike, just in case.”



No matter where it searched for additional fuel, the Muizenberg Fire of 2015 found itself ringed by drop-off points to which members of the public swarmed, delivering tons of practical aid. If residents living on the borders of the Central Section of TMNP had faced a tsunami of fire, the fire now faced an unrelenting groundswell of support for those managing, containing and suppressing it. Central depots were set up at TMNP's Newlands Incident Command Base, CTFRS's Lakeside and Fish Hoek Fire Stations, the Hout Bay NSRI and Watchcon offices and the Noordhoek Farm Stall.

In towns, suburbs and communities around the expanding ring of fire, Capetonians armed with cell phones, smart phones, iPads, laptops, notebooks, digital cameras and other devices took to their driveways and streets, discussing its progress and potential for damage with family, friends and neighbours.

And, like moths to a flame, they were drawn to the fire, their mountain and each other.

On Wednesday, 4 March, Primedia's Lead SA initiative announced that its CapeTalk and KFM listeners, from children to adults to civic institutions, NGOs and corporates, had raised more than R3 million to help fund and equip volunteer firefighters battling more than a dozen fires across the Western Cape. Companies and individuals offered fuel. Off-road motor vehicle manufacturers and suppliers were on hand day and night to repair firefighting organisations' broken vehicles. Banks and asset-management companies sought to outdo each other by donating hundreds of thousands of rands at a time.



On Wednesday afternoon, the Cape Town Cycle Tour Trust, organisers of the world's largest timed cycling event – due to be staged over 109 kilometres on Sunday, 8 March – announced that the 38th Cape Town Cycle Tour would be run over a greatly shortened 47-kilometre route.

With all planned and contingency routes adversely affected by the fire for months to come, the premier cycling event might well have been cancelled. However, after careful consideration and having – the previous day – opened a bank account for what became a donation of more than R500,000 to TMNP and the VWS, the Trust and its partner organisations elected to risk the prestige and standing of the annual event by running it as the *Cape Town Cycle Tour – Show Your Care Solidarity Ride*.

On receiving a standing ovation at the largest-ever Cape Town Cycle Tour Lifecycle Expo, which saw more than 67,000 people visiting 369 exhibitors over three days, CTFRS Chief Fire Officer, Ian Schnetler, voiced the sentiments of those working to stem the fiery tide:

“It’s very significant that my 10th coincides with the generosity that’s been shown by the City and by the Tour in acknowledging the work of the firefighters. I feel immensely proud and humbled that the City of Cape Town could come out and support firefighters.”

On Facebook, a rider commented:

“I will be riding for every Cape Town resident who has been affected by the terrible fires and especially for every member of the Emergency Services who has been involved in the efforts to bring an end to this terrible situation.”



Support for the decision was overwhelming, both in Cape Town and around the world. Participants continued to stream in to the Mother City and Sunday, 8 March saw an undiminished wave of 34,000 cyclists sweep across the Cape Peninsula in a dramatic and visually stunning celebration of those who had, on Table Mountain's still-smouldering slopes and peaks, brought the Muizenberg Fire under control.

It was left to the Trust's Marketing, Media and Sponsorship Director, David Bellairs, to sum it all up:

“Cape Town Cycle Tour 2015 will go down in the annals of history as the sporting event that united us as a community to selflessly recognise the efforts and suffering of others.”



A week later, the mix of pride and humility articulated by the City's Chief Fire Officer – needed to bring Capetonians together as never before – exploded in revelry at the sixth annual Cape Town Carnival, a 'Glamorous Celebration of African Identity', held beneath the rugged northern face of Table Mountain. Carnival-goers – animated and invigorated by having overcome the preceding weeks of energy sapping heat and flame – were determined to enjoy the freedom of the streets of Cape Town for a gorgeously warm, late-summer evening celebrating our cultural diversity and social inclusivity.



Approximately 55,000 people swamped the Green Point Fan Walk to salute a kaleidoscopic procession of floats accompanied by some 2,000 singing and dancing performance artists from every corner of greater Cape Town.

Rooted in the reality of a theme based on the elemental – earth, air, water and fire – the riot of phantasmagoria and colourful paraphernalia of carnival saved as its centerpiece a contingent of 600 firefighters – representing 2,000 from across the country who had fought and tamed the Muizenberg Fire – and they were welcomed home as heroes to a city united.

***Flamefest** Following the riot of colour that marked 2014's Cape Town Carnival, firefighters were welcomed home at the 2015 Carnival, the theme of which – Elemental – was entirely appropriate.*





“Somewhere among the burning trees we could hear the screams of baboons – a mix of fear and pain. Mercifully, I couldn’t see them, but it was easy to imagine them huddled together as their home burned around them with nowhere to go. We knew there was nothing we could do for them and, when the call came over the radio to contact the SPCA, it wrenched my soul.”

Kelly Vlieghe
Wildland firefighter

To borrow a phrase from our Australian cousins, you’d have to be a “pretty heartless bastard” not to relate to Kelly’s immediate, instinctive reaction to what she heard in those hours before dawn. Young, fit and working hard under extreme and difficult conditions to save life and property, the sound of that which she was working to avert must have been chilling.

As animals, we are – at many levels – attuned to the suffering of others and, when their perceived pain and fear unexpectedly cut through our layers of conscious and learned indifference, we react appropriately, as did Kelly.

However, much as our consciousness relies on people like Kelly to protect us from the potentially horrific consequences of fire, we rely on professionals – in the aftermath of disaster – to care for and take stock of the injured and dying. As people who aspire to fill the likes of Kelly’s firefighter’s boots, we must leave any assessment of damage done to the fauna of TMNP in the early days of March 2015 to those equipped to do so with the requisite professional knowledge, learned detachment and compassion for animals in distress.

As a people and a community from whom the mountain, its fauna and flora are never far away, Capetonians’ thoughts in times of fire will invariably turn to our much-loved or much-loathed troops

of Chacma baboons that roam, over increasingly small areas, the ridges, gullies, kloofs, gorges, ravines, slopes and wildland about us.

To reserve our concern only for these long-time residents of the Cape Peninsula would be foolishly short-sighted.

Our Fynbos Biome is under such stress that it is no longer capable of sustaining the many, frequently large, species that roamed it only a few centuries ago and our small antelope, such as the grysbok, steenbok, duiker and rhebok, are extremely swift and agile. Depending on the area burned, death or injury is the exception.

With the eradication of alien vegetation and the Muizenberg Fire being limited to TMNP’s Central Section – in 2000, two fires straddled the Southern and Central sections – klipspringer (Northern Section) and bontebok, grysbok, red hartebeest and eland (Southern Section) were largely out of danger.

Baboons are not only agile and mobile. They are highly adaptable and have lived with fire for millennia.

Other species – less agile, less mobile and less adaptable to a fast-changing, ever-shrinking habitat on which their existence depends – are more prone to the ravages of fire. It is these species that we dare not forget.



CHAPTER 7

THE TORCHED AND TORTURED

“The poor animals!!!! There will be so many casualties. I hope that the animal rescue groups get a chance to go out there asap and look for injured and burnt animals.”

Comment on professional photographer’s website

“So tragic that so much wildlife has been lost to the dreadful fires.”

“Ai, so heart breaking and sad.”

What elicits such comments? What drives these sentiments in times of crisis? In the case of the Muizenberg Fire of 2015, the same force that rendered so many animals helpless and people distraught – Nature.

In 2013, a paper published by the *ILAR Journal*, the Institute for Laboratory Animal Research’s journal, stated, “The degree to which the general biology of the baboon approximates the human condition is substantial. The biologic processes and changes associated with reproduction, growth, development, maturation, and senescence in baboons differ very little from those in humans ...”

Should we be surprised?

No.

In 2005, *National Geographic* told us that, having sequenced the genome of the chimpanzee, scientists had discovered humans and chimpanzees to be 96 percent alike. Frans de Waal, a primate scientist at Emory University in Atlanta, Georgia, was blunt. “We are apes in every way, from our long arms and tailless bodies to our habits and temperament,” he said.

Of course, our similarity to any other animal does not make us that animal, but it does indicate a degree of sameness and, perhaps, rapport with other animals.

Perhaps we are not that different after all.

BABOONS ...

The diurnal Chacma baboon (*Papio ursinus* – from the French for ‘baboon’ and ‘bearlike’) is the largest member of the monkey family and protects itself from predators by sleeping on cliff faces or in trees. Having adopted the Cape Peninsula as a suitable home close on a million years ago, baboon troops new to our Fynbos Biome would not have found many trees in which to sleep.

Human settlement, urbanisation, land transformation and the introduction of invasive alien vegetation swiftly changed the baboons’ habitats and their habits. Thus it was that, when fire tore through the canopy of Tokai Plantation pines surrounding SANParks’ Wood Owl Guest Cottage at 02:30 on Wednesday, 4 March, members of the Tokai troop – sleeping in the canopy – found themselves trapped.

Unable to escape, mothers with babies climbed further into the canopy. Consumed by fire, eight died immediately or shortly thereafter. Four sustained critical injuries and were later euthanased. A member of the Zwaanswyk troop died of smoke inhalation.

If we are to view these deaths as tragic – which, indeed, they were – we must extend our appreciation of tragedy to encompass the untold thousands of deaths caused by the Muizenberg Fire. We should perhaps extend it further – to a realisation that tragedy can be nature’s way of protecting biodiversity.



If fynbos is protected and fire managed, TMNP's ten northern, southwestern and southeastern baboon troops – each comprising between 10 and 70–80 individuals and numbering some 370–380 in total – are closely monitored.

Thirty years of research into the foraging behaviour across the Wildland Urban Interface by the Cape Peninsula's baboon troops resulted in a range of governmental and civic organisations forming the Baboon Management Team (BMT). In 1999, it introduced baboon field rangers to monitor two of the Park's most notorious troops.

By 2002, the BMT was “paralysed by polemics” and heated monthly meetings during which consensus was seldom reached. The baboon troops were worse off than before. The University of Cape Town then established the Baboon Research Unit (BRU) “to provide data essential to understanding the causes, consequences and possible solutions to the conflict” between city dwellers and their raucous neighbours.

In 2010, the BRU's work enabled local, provincial and national conservation authorities to form the Baboon Technical Team (BTT), which took over the short and long-term management of our baboon troops.

Members include the City of Cape Town – the Environmental Resource Management Department of which funds and implements its Baboon Management Programme through Human Wildlife Solutions (HWS) and its partners (including the Cape of Good Hope SPCA Wildlife Unit), SANParks, the SA Navy and CapeNature. The BTT meets regularly with the members of the Baboon Liaison Group (BLG), ensuring interaction with affected communities.

Since the BTT came into being, 68 rangers have monitored the ten troops throughout the year. Noise and pain aversion measures introduced into baboon management protocols in 2012 have seen deaths and injuries suffered by baboons drop by more than 50 percent.

When the Muizenberg Fire entered Tokai Plantation by way of Steenberg Ridge and the Prinskasteel Valley at around 14:00 on Tuesday, 3 March, HWS managers immediately joined rangers in moving the Zwaanswyk, Tokai, Constantia and Mountain troops (numbering 221 individuals) to low-lying areas. The Tokai troop refused to move lower than its Wood Owl Guest Cottage sleep site on Level 1 where, at 17:00, it was safely ensconced.

Within hours of the firestorm erupting shortly after 01:00 on Wednesday morning, the Wood Owl Guest Cottage was a smoking ruin. By 06:00, amidst still-burning pines in danger of collapsing, HWS managers and rangers, members of the BTT (including members of the City's Environment Resource Management Department's Biodiversity Branch), members of the CoGH SPCA Wildlife Unit and veterinarians from the City of Cape Town and CapeNature were on the scene. The remaining members of the formerly large, 73-member troop had moved to the riverine Fairy Forest nearby.



Unable to move the troop by midday and asked to leave the area by firefighting authorities, the contingent felt the troop to be out of danger and returned on Thursday morning at 06:00 to undertake what would become daily assessments until Monday, 9 March. All injured baboons were assessed by veterinarians and those with minor injuries were allowed to remain with the troop, subject to close monitoring over several weeks.

With the fire having released many thousands of seeds from the pines' cones, the Tokai troop's foraging behaviour changed little and, while they continued to sleep in the vicinity of the gutted Wood Owl Cottage Guest House, they did not lack food. Moreover, with autumn promising rain and fresh shoots, they appeared to be in a good position.

The 29-member Zwaanswyk troop, which followed much the same foraging pattern as the Tokai troop, did not lose its sleep site. However, a count of troop members indicated that a juvenile had died, possibly due to smoke inhalation. No body was found.

Through Wednesday, fire destroyed much of the 72-strong Constantia troop's home range and, with assistance from HWS rangers, the Buitenverwachting, Klein Constantia and Groot Constantia wine farms



allowed the Constantia and Mountain troops to feed on harvested vineyards, which still contained grapes, and barley planted between the rows of vines. While this afforded the 49-member Mountain troop extra food, its range above Buitenverwachting suffered the least damage and close monitoring in the fortnight following the fire showed them to have sufficient unburnt vegetation on which to forage.

Extremely low autumn and winter rains saw far fewer shoots sprouting than expected. However, for the Zwaanswyk troop, the pine-seed bonanza continued as Cape Pine harvested burnt pine and gum compartments. The Tokai, Mountain and Constantia troops continued to gorge themselves on raisins and barley at Buitenverwachting, Klein Constantia and Groot Constantia.

One possible effect of the fire became increasingly evident over succeeding months. The large Constantia troop appeared likely to split, possibly as a result of the distribution and availability of food resources. By June, the split, which is also a natural occurrence in large troops, appeared permanent.

On the Silvermine side of the Constantia Valley, the Zwaanswyk troop remained united. Having taken to the hills, it feasted on the greenery available above Steenberg Ridge.





... CATS ...

If Kelly Vlieghe’s instinctive response to the screaming of baboons was appropriate, it was as appropriate for residents of the upmarket suburbs ringing the Central Section of TMNP to look to the wellbeing of animals in their care.

Maureen Lavies did. The ordeal to which she was subjected early in March encompasses wildfire, property loss, suffering, community spirit, volunteerism and the 24-hour-a-day monitoring of the animals closest to us. At the time, her large, secluded property housed an extensive, exclusive cattery for discerning felines.

For grimalkins with a taste for classical music and their own space desiring a break from their fractious owners, Maureen’s cattery served as a pampered retreat, a spa at which the domesticated cat could unwind and relax after months of caring for its humans.

At Purrmore Cattery, their hostess attended to their every whim – a situation right up every self-respecting cat’s alley. Nor were they subjecting themselves to the perhaps misguided good intentions of every suburb’s archetypal cat lady. Elegant, stylish and friendly, the proprietor of Purrmore catered to their needs – not for psychologically suspect reasons, but because she loved doing so. Cats therefore repaired to her establishment whenever they could manipulate their humans into giving them some much-needed rest.

On Wednesday morning, shortly after 03:00 – in the compulsive and vindictive fashion of wildfire, the Muizenberg Fire leapt Maureen’s fence, curled around the main house along a row of trees lining the wall separating one property from the next, and reduced the cattery to ash, leaving neighbours’ properties largely unscathed.

Using the densely vegetated garden for fuel, the fire lingered on the property, destroying every comfortably-appointed kitty apartment it could find. Enraged at not finding its chosen prey, it turned its vicious attention to a caravan, a 15–20-metre hedge separating Maureen from a neighbour and eventually, the main house – gutting several rooms.

Purrmore was no more.

“There were many times that I felt overwhelmed by the damage that the fire caused. I lost my business, my source of income, a third of my home and my passion in just a few hours. There were times that I didn’t want to get out of bed in the morning. Clients would phone me or stop me in the street to sympathise and I would dissolve into tears.

It would have taken me way longer to reach the point at which I am now – able to chat easily about the hardships and heartaches – if family, friends,

neighbours and Purrmore clients hadn’t helped and supported me the way they did. My telephone lines were destroyed, so I had no land line and no computer. I had only my cell phone – and reception up here on the mountain is abysmal.

The frustration was huge.

But then a client arrived with a huge armful of fleeces for the new cattery. Another came with bowls and litter boxes; another brought kitty toys and scratch posts, another brought a plate of food or a bottle of wine and another handed me a tub of hand cream and other toiletries. Members of the local community offered counselling, flowers and stress-release training. A dog kennel was delivered – and a rabbit hutch. People came with wire netting, wood and a metal shed. There were offers of labour to help move the mountains of rubble to the dump, or to help build a new rabbit run and chicken coop. Plants of all kinds were delivered. Offers of help of any other kind were forthcoming.

On the eve of the fire, clients and friends pitched up in bakkies and 4 x 4s to help. The gas bottles were taken to a place of safety. Cats in travel boxes were loaded up – some to go to friends who have catteries and the balance to be accommodated in a client’s large, empty garage. The same client took my tortoises. A neighbour took my hens and ‘Igloo’, my rescue white bunny. My photographs and other precious possessions were loaded up and taken away.

My very dear friend from UK arrived on the eve of the fire and his help was invaluable. He’s the one who sent me a Bonsai tree, in memory of the many trees I had lost in the fire and to symbolise a new beginning. The fire destroyed all but one of the massive trees I had on my property and it took out a lot of the smaller trees too. Nor could I have done without the professional advice from two of my friends when I was faced with a decidedly unsympathetic insurer.

If ever experience highlighted how tragedy brings out the best in community, friends and family, mine proved the perfect example.”

Maureen Lavies

In suffering significant damage to her property, Maureen had become – like the Collingses, the Willamses and the Richardsons – a victim of the Muizenberg Fire. She had also lost her business and her life’s work. Four months after the fire – in the middle of a biting Cape Town winter – she is directing and working with parties of volunteers to restore her home and once verdant garden.

What the future will bring, she does not know. Rebuilding her business from scratch will not bring back that which she has lost. She speaks guardedly of retirement but senses the future promises something else – something different and perhaps better.

Anybody in her company would sense the same.



... AND OTHER ANIMALS

Zwaanswyk and other suburbs lying beneath Constantiaberg in the greater Constantia Valley are as much ‘horse country’ as the Noordhoek Valley. Owners’ equine charges are to be found in stables, paddocks and studs on both sides of the mountain and, as the Muizenberg Fire turned its attention to the suburbs below Constantiaberg on Tuesday, 3 March, owners and grooms ferried dozens of horses to safety.

CoGH SPCA spokesperson Wanika Davids reported 21 horses being rescued on the Tuesday evening and Teri Smith, stable manager and senior instructor at Constantia’s South African Riding for the Disabled Association (SARDA), reported taking in 37 horses and a pig early on Wednesday, 4 March.

“We basically provided a safe place for the horses to come to. Most people are finding that the paddock centres have been burnt,” she said.

Evidence of the concern owners felt was apparent at the five-hectare Sahibi Arabian Stud on Zwaanswyk Road, abutting the Tokai Plantation. With their olive-green, resin-rich pine needles having been torched by the blaze, rows of pines lining the paddocks metamorphosed to a strangely beautiful copper-coloured reminder of the firestorm that had visited the area overnight.

Recalling firefighters leading horses down to SARDA early on Wednesday morning, Smith said, “It was quite an eerie experience. You would hear explosions and the flames would jump really high. You just have this end-of-the-world feeling. We’re still covered in smoke and ash, but we’re not under threat.”





Following an outbreak of fire in the TMNP – be it a prescribed burn or otherwise – the most abundant evidence of animals falling victim to it invariably takes the form of myriad charred tortoise carapaces littering an eerily quiet, ashen landscape circled by raptors and marred by the angular, contorted skeletons of fire-blackened bushes.

Unless accustomed to the sight, it can be shocking. Many Capetonians found this to be so in the wake of the Muizenberg Fire and Anton Crone's stark photograph of a charred tortoise frozen to stillness by fire and flame became one of the many iconic images of the fire.

We can learn much from these tortoises that have themselves, in large part and despite their high mortality rate, become seemingly inured to the ravages of fire.

If we look back to the 2000 fire season, fynbos fires killed 98,000 to 275,000 angulate tortoises, our most common species. It is a simple truth that nature cannot sustain that which it cannot feed.

Covering less than one percent of the global land surface, South Africa has the most biodiverse population of tortoises. While accepted figures vary, the country is known to be home to almost a third of the world's more than 40 species – of which as many as ten species, including the rare geometric tortoise, are found only in the fire-prone Western Cape.

Tortoises, increasingly the target of poachers who use them for food or medicinal purposes, have survived fire for some three million years by burrowing into the sand or finding refuge among rocks.

The strange reproductive cycle of the common angulate tortoise, such as that saved by 27-year-old WoF firefighter Songezo Fobisi (captured in yet another iconic image by photographer Gale McAll), may add to its ability to see off the worst of fires.

Not only are females able to store sperm for extended periods, they carry their eggs for anywhere between three weeks and seven months, depending on rainfall and ambient temperature. Stimulated by rainfall, a single egg is laid in a 10-centimetre-deep nest and the incubation period can last anywhere between three and seven months, depending on how long the female tortoise has been carrying it. The eggs hatch after the first autumn rains.

A female angulate tortoise can lay up to six eggs a year and lives for 30 years.

Such knowledge may well comfort us, but it does little to mollify the concern of a child living on the Wildland Urban Interface, at which large wildfires are likely to be suppressed and injured animals appear in abundance.

The CoGH SPCA and Four Paws International urged Capetonians not to look for injured animals on their own, but to keep bowls of water in their gardens for injured or overheated buck, tortoises, porcupines, birds, lizards and rodents.

Rodents escaping the fire across the Wildland Urban Interface invariably draw snakes, which survive fire by going underground before surfacing again to gorge themselves, into suburbia.





Some bird species – for example, the Cape rockjumper – would profit off dead insects and fresh fynbos growth for up to five years. Others, such as the Cape sugarbird, which feeds off mature proteas, tend to move elsewhere in search of nectar. The orange-breasted sunbird, which is territorial, does not fare as well.

If wild animals are uppermost in our minds in times of crisis, those who care for them are not far behind. Charged with locating injured animals and ensuring their safe care in the hands of skilled veterinarians, CoGH SPCA Wildlife Unit Supervisor, Inspector Megan Reid, and her two colleagues, Inspector Gareth Petterson and then-trainee Inspector Shaun Giles, who tend wildlife over an area of more than a million hectares, found themselves in the public eye.

Having rescued many tortoises, several snakes and five porcupines suffering severe injuries to their skin, quills and feet, as well as a hauntingly beautiful Cape grysbok with burnt

hocks found in a shallow pool by *Africa Geographic's* Christian Boix, their care of the injured animals at the CoGH SPCA Wildlife Short Term Care Facility in Grassy Park became the focus of media attention.

Sadly, the grysbok – which was healing well – died of lung damage caused by smoke inhalation and three of the porcupines succumbed to their injuries.

However, two months after the fire, the small Wildlife Unit was joined by TMNP Manager Paddy Gordon and TMNP Section Ranger Jaclyn Smith to release a feisty porcupine (unofficially nicknamed Pee-Pee because of his propensity to do just that on anybody and everybody) back into the wild to join other successfully rehabilitated animals, including two angulate tortoises, two parrot-beaked tortoises, a puff adder and a boomslang.

The remaining porcupine, which was well on the road to recovery, was due to be released shortly thereafter.

Within a month of Inspector Megan Reid uncovering porcupine traps in the aftermath of the Muizenberg Fire, she found herself in conflict with traditional healers. Following a report that about 20 porcupine snares have been uncovered in the city following increased demand for their meat, Fanoyi Dlamini, of the Traditional Healers Association of South Africa, stated:

“We use the porcupine meat for muti purposes. We mix it together with our herbs and then burn it. It heals really well and is very expensive to buy. We have been using it for years, it is not illegal.”

Reid responded:

“The porcupines are basically poached for their meat. We usually come across around 20 mesh traps a year, which can be found in any high-density bush areas. Constantia has been one of our growing concerns. As many as seven traps have been spotted there lately. It is illegal and anyone caught could be charged. It is sad to see this happening to our wildlife.”



“By saving one, you save us all.”
Songezo Fobosi – WoF Firefighter

“In the fynbos, fire is essential for maintaining the ecosystem
and 15 years is an optimum time for fynbos to burn.
In a sense, these fires are right on time.”

Dr Adam West, March 2015

In 2008, at Blombos Cave near Stilbaai in the heart of fynbos country, researchers working under Professor Christopher Henshilwood uncovered a 100,000-year-old ochre-processing workshop.

The discovery led Professor Henshilwood to write in the October 2011 edition of *Science*:

“The conceptual ability to source, combine, and store substances that enhance technology or social practices represents a benchmark in the evolution of complex human cognition.”

In large part, our species’ cognitive capabilities has led to it imposing on Nature that which is unnatural. Little wonder our scientists wish to keep us this side of the Wildland Urban Interface.

We are the new kids on the block ... and we are interlopers.

In conversation with *UCT Daily News*, ecologist Dr Adam West likens our positioning of luxury hotels on the Atlantic coast and “vineyards planted right up to the natural vegetation on the mountains” to “time bombs” or “building below the flood line of a river”.

Commending Cape Town’s urban planners for curtailing development on the higher slopes of the Peninsula’s mountains, he concludes:

“[W]e need to get this conservation message out to the public. Though we want to save the tortoises and other small animals, they too ultimately need the fire for continued existence. Fire resets the ecosystem.”

Fynbos, like that surrounding Blombos Cave, has used natural phenomena – such as fire – to sustain and renew itself for 3 to 5 million years.

We *Homo sapiens*, a youthful species with a 100,000-year history of transforming the natural into that which is injurious to Nature, stand in awe of Nature’s ability to adapt and rejuvenate. Awe, born of our detachment from that before which we stand in wonder, will teach us little of or about it.

Scientists, working on both sides of the Wildland Urban Interface, understand our awe and our detachment. They know that by maintaining a suitable distance between our species and Nature we may continue to enjoy a peaceful and harmonious coexistence.

By listening to such authorities, we may well grant ourselves and other species a new lease on life.

• Heritage Western Cape proclaimed the Blombos Cave a provincial heritage site on 29 May 2015.





CHAPTER 8

A NEW LEASE ON LIFE

“Let’s allow the competent local authorities to manage fire sensibly on our beloved peninsula. We cannot eradicate fire as we did the Cape’s lions, and to do so would be to impoverish the peninsula’s astonishing biodiversity.”

Dr Simon Pooley – 6 March 2015

Our plant species, which have been around far longer than we, have learned from history. Each fire – which is much like any other for the fynbos caught up in it – forms part of a process that invariably sees those of us with short memories gawking in wonder at the vibrant, living colour covering the drab wasteland left in its wake of any conflagration.

Nature’s palette and canvas are immense and it uses them to startling effect in melding seemingly incompatible landscapes, lending the cycle of life immediacy and clarity.

Within days of the Muizenberg Fire’s suppression, images started appearing on Twitter and Pinterest of a seeming wild abundance of shoots, sprouts, animal and birdlife. Web sites and the mainstream media followed swiftly and the gloom many Capetonians felt on surveying the charred firescape began to lift.

Some were even drawn to the Central Section of Table Mountain National Park (TMNP) to witness the spectacle.

The first soft autumn rains saw the appearance of fire lilies and most of us, secure in the knowledge that a third of Table Mountain National Park (TMNP) had not disappeared in a ball of fire and a cloud of smoke, returned to following the regular news cycle or posting fridge magnets to Facebook.

The less sedentary, satisfied by a rush of apparently previously-entombed experts telling us that fire was “a jolly good thing” and “absolutely necessary for fynbos survival”, immediately returned to their normal ways, strapped their bicycles to the back of their cars, headed off to Tokai, Silvermine and other places and wondered what the hell SANParks was doing blocking public access to our newly-invigorated and revitalised recreational domain.

Those who came back down off the mountain seemed strangely elated and gleeful – as if, in surveying the still-smoking, powdered, black-and-white seamed sands, they could hear feathered seeds popping from protea cones with the exuberance of breakfast cereal characters leaping from cartons opened on TV advertisements.

“Bursting” and “erupting” were frequently used to describe the phenomenon.



They reported great swathes of white and brown seed – a feast too munificent for even the most food-deprived insects and rodents emerging from their burrows to pack their cheeks and stuff their faces – spread like great carpets of rust by a wind playing with patterns.

Across the supposedly dead land marched disciplined armies of ants. Ignoring their lack of cover from countless predatory birds seeking alternative sources of food, legions of other insects took to the road and air with martial precision.

Of course, none of this order or focus lasted.

On reaching the first tortoise carapace, snake carcass or bed of seeds, mayhem ensued and it was every six-legged little monster for him or herself. Never, for the insects anyway, had food been so readily available.

If Capetonians wandering these fire-scoured hills noticed the charcoaled, crabbed husks and twisted candelabra of toasted bushes, they seemed to pay them no heed. Of stumps or straggly, spidered stalks stripped of life, they saw little. They saw not black, white, brown or khaki, but yellow, gold, rust, bronze, copper, russet and red – the colours of Nature the painter at work.

The yellow fire flower daisy, or *brandblom*, and the florid and ungainly, bright-as-can-be red-and-yellow paintbrush lily shouted across TMNP’s Central Section, “We’re back!”

More people noticed. And they saw much that was green. Restio is, by name and nature, restless, and large patches of delicately green-tufted clumps bespoke a determination to proliferate in a land freed of the old and the dead. Within days, fields of watsonias, their spears signalling intent, appeared out of nowhere.

The fynbos about such people had not been burnt. It had been transformed into a thriving factory of fresh seed cast to the wind and the mineral and nutrient-rich soil, which had been fed by the ashes of the past and was now in splendid abundance.

Far from being laid low by fire, Nature had – clearly and visibly – put itself to work.

Interviewed by EWN, SANParks regional ecologist Carly Cowell swept away a thin layer of white sand, uncovering dark, rich soil.

“The soils in fynbos are very sandy and they’re nutrient poor,” she explained. “What we actually find after fire is the top surface of all the leaf litter gets burnt and then that actually releases the nutrients into the soils. And if we walk on it we actually trample that and that whole process is a very sensitive system.”

Hence TMNP’s closure of large sections of the park. Disturbing the soil leads to runoff, which, in turn, leads to mudslides.





Navigating paths made slightly strange by the bulk of once-covered and familiar rock formations – now hulking, somewhat sinister, seemingly intent on misleading and all carrying seeds in their cracks and crannies – walkers saw evidence of other geophytes, squat and solid as overweight onions – buried or dormant for who knows how long – breathing sighs of relief and shooting leaves into a new-born habitat uncovered and uncrowded, revealing themselves to be orchids, irises or hyacinths.

“There are a lot of species that will always come up well after fire,” UCT biologist Adam West told eNCA. “But then, which ones dominate the landscape depends on how many seeds were around and how intense the burn was. That’s a bit of a lottery. We’ll have to wait and see.”

And there is much to wait for.

“We could see species that have been sitting in the soil for up to 50 years suddenly come up,” said West.



It may be a while before we see them though. TMNP closed its Silvermine and Tokai sections on 12 March 2015 for an indefinite time. Reasons for the closure include:

- Smouldering and burning vegetation may cause flare-ups.
- Standing trees that have been burnt or damaged by fire may fall.
- Burnt roots may cause ground to collapse.
- Unstable slopes may result in rock falls.
- Wind and rain may exacerbate the danger of falling trees, branches, rock falls and mudslides.
- Hazardous clear-felling operations by Cape Pine are under way.
- Surviving animals may be disturbed.
- Windblown seeds in burnt areas are sensitive and can be damaged – emerging plants can be trampled.
- Sensitive, erodible soils may be disturbed.

Through a reading of this book, we will have come to understand these well-founded concerns. However, to underline the wisdom of such a policy, it is worth noting comments made by Human Wildlife Solutions (HWS), a biodiversity conflict-management organisation.

On 16 May, more than two months after a firestorm engulfed the Tokai Plantation, HWS observed:

“... there has been surprisingly little new vegetation sprouting. Fortunately the pines, felled and unfelled, are still providing plenty of nuts to feed on.”

An image of a subterranean log, smouldering despite ten weeks having passed and soft rain having fallen, accompanies the entry.

A month later, on 13 June, HWS noted:

“On Vlakkenberg the Fynbos is sprouting strongly, but in the old plantations or recently rehabilitated Fynbos, where the fire was probably much hotter, regrowth seems to be progressing more slowly.”

The continuing closure of these limited areas can, in large part, be attributed to alien invasive vegetation having caught alight on the Wildland Urban Interface.



The City and TMNP moved swiftly to preempt and mitigate damage caused by the onset of winter rains.

The City's transport authority, Transport for Cape Town (TC), promptly installed five kilometres of geo-fabric silt fencing above Boyes Drive, Clovelly, Noordhaven, Noordhoek, Tokai and Ou Kaapse Weg. Boyes Drive and Ou Kaapse Weg were bolstered by 7,000 sandbags (with a further 3,000 being made available for other areas in the South Peninsula), dragon teeth were installed at 11 different stormwater catch-pits and mountainside stormwater inlets, and six reinforcing gabion structures were built at Ou Kaapse Weg (two), Boyes Drive (two) and Zwaanswyk (two).

While the City sought to ease the commuter's path through the Park, SANParks Honorary Rangers from the Table Mountain Region (TMR) worked to sustain and restore the Park's biodiversity.

Having provisioned wildland and urban firefighters at their posts throughout the blaze, assisted the Tokai Neighbourhood Watch and SANParks staff man roadblocks sealing the devastated area, worked with Chrysalis Academy students to clear litter exposed by burnt overgrowth and raised a significant amount of money to rebuild boardwalks destroyed in the Silvermine section, the Honorary Rangers turned the tables on our insidious 'developmental' degradation of Park land by using it to Nature's advantage.



The Muizenberg Fire had barely been extinguished when a group of Honorary Rangers, prompted by SANBI restoration ecologist and TMR SANParks Honorary Ranger Dr Tony Rebelo, spent two long evenings gathering 222 kilograms of protea seed from drainage channels lining Constantiaberg's winding Radio Mast access road.

Destined for the city's stormwater drainage system, the seeds were then – over three evenings and after erosion and harvesting teams had left the Tokai Plantation disaster area – spread over vast areas of burnt pine compartments before the onset of our cold, wet winter.

Dr Rebelo explained the need for prompt, preemptive action.

“These seeds are needed to restore the fynbos in the burnt-down sections of the park, and this intervention is merely the start of the restoration process, which should proceed naturally after the next fires.”

“This intervention is necessary as, under the pines, the serotinous species (those that store their seeds on the plants between fires) die out and thus do not have a seed bank. Recovery of these species from the seed bank is not possible, and it will take dozens of fire cycles (on average every 15 years – or over 200 years) for the

plants to disperse back naturally. Proteas are dominant overstorey plants in Fynbos, playing a major role in many fynbos cycles and their absence from the restored ecosystem for so long will hamper restoration. Even so, it will take several fire cycles for the plants to disperse throughout the area, find the suitable habitats and reach a natural equilibrium.”

Germination of the seeds commenced as soon as the soil was saturated by rain and temperature lows reached 9 °C.

The historical significance of the SANParks Honorary Rangers' action cannot be overstated.

Ingenuity and innovative thinking saw not only the continued return to the Fynbos Biome of 610 hectares of land rendered seedless by over 150 years of state forestry. In speeding to generations a process that might have taken centuries, the Honorary Rangers demonstrated the ability of Capetonians to reverse the depredation of land in the Constantia Valley since Vereenigde Oostindische Compagnie (VOC) Governor Simon van der Stel planted 4,379 oaks at Tokai in 1694.

They demonstrated to us that three centuries of fynbos mismanagement can, symbolically and practically, be reversed in three days.

If the unfolding miracle, which will continue for two to three years – and can easily be viewed on the Muizenberg, Kalk Bay, Constantiaberg, Chapman's Peak and other mountains – is anything to go by, TMNP's arguments for closure of the damaged section of the park are compelling and reasonable.

If our fynbos species – which, for two to three years, will celebrate the continuance of life in a magnificent burst of oft-gaudy but always splendid colour – can teach us anything, it is to view the Muizenberg Fire and those of 2000 as events forming part of a process we so easily label but so readily forget.

And, much like members of our floral kingdom, if we – as city dwellers – are to celebrate rather than bemoan the cycle of life, it is up to us to adapt to the possible consequences of fire. We, as people living on a side of the Wildland Urban Interface to which fire is anathema, are – like Nature – artists confronting an urban canvas.

The picture we choose to paint depends on our willingness to master our craft. Its colour, intensity, depth and shades will articulate our willingness to coexist with the Fynbos Biome about us and it will determine the cycle of our lives for generations to come.





“We’re more like a family than colleagues. We’ve got two families;
one at home and this family. We’re all adrenalin junkies.
What we do is not dangerous, but it has inherent risks.
We’re highly trained and highly skilled. But some things are just out of our hands.”

Trevor Wilson, Working on Fire Aviation General Manager and Pilot

It is a quiet, chilly and unusually dry midwinter’s day at TMNP’s Newlands Incident Command Base. A feeble sun tries in vain to burn away the cold. Fronted by a large, treed parking area, the TMNP Fire Management offices are almost lost among the cluster of single-storey buildings huddled beneath the gums and pines stretching up through Newlands Forest.

A solitary, canary-yellow WoF Bell UH-1H Huey sits on one of the two helipads above the offices.

At WoF’s Newlands fire base (a sign outside proudly proclaims it be the “Home of the Stormers Hotshots”), members of the High Altitude Team are readying themselves to spend the day abseiling down the craggy cliffs rising 800 metres above them – to remove alien vegetation from usually inaccessible areas.

The dispatch, planning and logistics offices are small but compact – as is the kitchen. Surrounded by resource whiteboards, WoF Dispatcher Yusuf Hartley is connected to the TMNP Operations Section Chief, WoF ground crews, WoF Aviation and the City. In the adjoining, similarly utilitarian office, in muted conversation with Station Manager Jon-Jon Emary, Peter Wynne of the VWS plots a fire-progression map on one of several screens.

TMNP Fire Manager Philip Prins’s office, leading off from the boardroom, which seats eight or ten people, is slightly larger than these utilitarian spaces.

It needs to be.



CHAPTER 9

THE FIRE WITHIN

“I’ve fought other fires, but nothing like this. It’s a scary fire and so dangerous. I could feel the flames ... but I love what I do.”

Anelisa Fani – WoF Firefighter

“Philip Prins is remarkably calm for a man in charge of an inferno. He answers a cellphone call with one hand, and holds a walkie-talkie in the other. Panicked voices on the other side of the phone grow quiet as he dishes out advice.

Prins is fire manager for Table Mountain National Park, stationed at Newlands forest. He is one of only two permanent staff running an emergency department that must co-ordinate all firefighting activity.

He manages a complex cast, ranging from grizzled helicopter pilots who have seen more fire than bathwater to fresh-faced civilian volunteers who arrive with a spade over their shoulder. He must also liaise with municipal and provincial government officials. He works any time of the day or night, any day of the week. ‘My job doesn’t have any hours,’ Prins says. ‘I can’t just go out for a drink.’”

TimesLive, 8 March 2015

Prins, Cape Peninsula Fire Protection Association Manager Pierre Gallagher, and TMNP Operations Section Chief Clinton Dilgee are seated around the boardroom table, recalling – with the same calm – those early days of March.

“On finishing up for the day, the pilots would join us here for a drink,” recalls Prins. “They’d brief us on the situation and we’d establish our priorities for the next day.”

A momentary silence settles on the men who make up TMNP’s entire wildfire firefighting force. The unseen presence, around the table, of WoF pilots Colonel Hendrik Willem ‘Bees’ Marais and WoF Aviation Chief Pilot Darrel Rea – drinks in hand and plotting the following day’s operations – is palpable.

Within days of dousing the Muizenberg Fire, ‘Bees’ Marias (71) died following a forced landing at Cape Point. Six weeks later, Darrel Rea (39) and Helicopter Safety Leader Jastun Visagie (23) were killed after making an emergency landing in Rea’s Bell UH-1H Huey at Bainskloof.

In that moment of stillness, it becomes clear that pilots like Trevor Wilson, John Mittelmeyer, Fred Viljoen and others are not adrenalin junkies. They are professionals willing to push themselves to the limit and risk their all in doing so.



Focusing for up to seven hours at a time, able to smell and feel the fire beneath them, these highly skilled and highly trained WoF pilots – consistently and without fanfare – face risks that make theirs an extremely dangerous profession. Graham Barlow, former Western Cape General Manager of WoF, writes:

“Piloting a Huey over a fynbos fire on a mountain requires specific skills (and courage) from an exceptional set of chopper pilots. The runaway fires are normally accompanied — and driven — by gale-force southeasterly winds, and dropping a line of water from a ‘bambi-bucket’ on a fire front with your rotor blades feet away from a solid mountain in these conditions calls for experience gained only by years of piloting over fires.”

The pilots stress teamwork. Shortly before his death, Darrel Rea said:

“The guys on the ground are the important guys on the fire. What we do from the helicopter is drop water that cools the flames enough so that the ground teams can go in and beat the fires. We’re coordinating with them by radio the whole time, so we’ll drop a bunch of water on the fire, and then they’ll come in and actually beat out the fire. They do the hard work in this whole thing.”

Among “the guys on the ground” was Nazeem Davies, 25, from Worcester, a West Coast District Municipality firefighter who, while on his way back to the Vredenburg station from the Winterhoek mountains after responding to a fire above Porterville on 6 March, lost control of his vehicle on the Dasklip Pass.

He died when it struck a large boulder. His passenger, fellow firefighter Niklaas Nel, escaped with minor injuries.

The words of Commander Frank Forbay, Divisional Commander of the City of Cape Town’s District East Fire and Rescue Services, a 22-year veteran who was badly injured at the Tintswalo Atlantic Lodge (razed beneath Chapman’s Peak Drive on Tuesday, 3 March) while switching a hose from a hydrant to a tender, come to mind:

“As firefighters, we do what we must do. It’s our passion.”

Speaking of his injuries, one can only wonder at such passion. But Frank Forbay is phlegmatic:

“I managed to get the lugs loose and, at the same time, my colleague handed me one of the fog jets. And, as I turned around, there was an explosion inside the room. I think it was a gas cylinder – or some cylinder ... a pressurised cylinder inside that room that went Boom!

And there was like a Swoosh! sound and the temperature, in excess of 1,000 degrees, just came right through me ... right past me. I could feel the skin melt off my fingers ... off my hand. Fortunately, I had my full firefighting protective gear on – except for the gloves, which I’d just removed moments earlier to remove the lug.

I had my visor down, and also my flash hood. A flash hood is like a balaclava that we have under our helmets. That protected my face. So, I’ve just got slight singeing of my face, but my hands ... it totally stripped the skin off my hands.”

How did he deal with the situation?

“There was a Jacuzzi five metres away – I jumped in to cool my body.”

After making the self-effacing statement attributed to him at the start of this chapter, Trevor Wilson is said to have looked across the helipad to the wall of remembrance erected by the public in Bees Marais’ honour, and commented:

“Bees was a man with a quiet wisdom. A solid gentleman. And he was a friend.”

As laypeople mesmerised by wildfire, we see small, instantly recognisable groups of two, three or four Hueys – like gnats seeking to ward off a thunderstorm – taking on monstrous fires. The Bell UH-1H Huey (17 metres long, 2.6 metres wide and 3.4 metres high) is a large, functional, 2,400-kilogram aircraft, which, when fully loaded, weighs well over 4,000 kilograms.

There is no such thing as a soft emergency landing in a Huey.

When news of Bees Marais’ forced landing came through from Cape Point on Sunday, 8 March, the Newlands’ Incident Command Base sealed its Operations and Planning sections. While continuing their necessary work, several seasoned personnel from various organisations broke down in tears.

The call for a mortuary van was not long in coming and grief overwhelmed all who were aware of the incident.

In speaking of Bees Marais, WoF pilot Trevor Wilson may well have been speaking of himself, Darrel Rea, Nazeem Davies, Jastun Visagie, Niklaas Nel, Frank Forbay, his fellow pilots, the senior men of fire seated around the boardroom table, those abseiling the cliffs above to prevent the outbreak of fire, and the many thousands of men and women who dedicate their lives to containing or suppressing wildfires.

These men and women, be they pilots or wildland or urban firefighters, have faced and will continue to face – for as long as they continue to fight and contain fire – crippling injury or loss. And each time they do so, they will be offered and given trauma counselling to cope with their grief or disability.

Bravado is anathema to such people. They are all, as Trevor Wilson points out, skilled and trained professionals – team members more comfortable at taking than giving orders. It is testimony to their integrity and remarkable modesty that we recognise their courage, bravery and sacrifice.

If we are who we are through other people, we can, as South Africans and through and with such men and women, face and overcome any calamity.

Philip Prins accompanies his guests to the doorway of the Fire Management Centre, offers a handshake and an invitation to drop in at any time. Like Colonel Hendrik Willem ‘Bees’ Marais, he too is a ‘solid gentleman’.

• Following meetings between the Commercial Aviation Association of Southern Africa (CAASA) and the South African Civil Aviation Authority (SACAA) in November 2014, SACAA withdrew the Air Operating Certificates of Working on Fire (trading as FFA Aviation) on Tuesday 14 July 2015, grounding its fleet of helicopters and fixed-wing aircraft.



How does an internationally acclaimed, globally syndicated photojournalist ‘get the story’? Reading Cape Town’s award-winning European Press Agency photojournalist, Nic Bothma, it seems it all boils down to professionalism, skill, passion, grit, a never-say-die attitude and unstinting hard work.

Like Nic, each contributor who volunteered their images of the Muizenberg Fire of 2015 to this publication – be they published or not – knows this to be true.

The Cape Aflame project team thanks each and every photographer who voluntarily submitted his or her work for possible inclusion in this book. Your demonstration of the same spirit made evident during those first fiery days of March 2015 proves the enduring generosity of Capetonians.

We appreciate your willingness to freely give the results of your professionalism, skill, passion, grit and unstinting hard work to a cause larger than any of us. It is with no small measure of humility that we thank you for perpetuating and expanding on a legacy of giving and volunteerism.

Without your willingness to give, this book would not have been published.

You made it happen.

Through your eyes and lenses, we have been able to capture and chronicle a remarkable time in Cape Town’s history – a time in which we were afforded immense opportunity to learn something of each other, our unique Cape Floral Kingdom, our mountain and ourselves.

Our wish is that we continue to harness and carry that unity of spirit and purpose as we educate ourselves in our very real need to cherish and protect our Fynbos Biome during the seasons of fire and flame that lie ahead of us.

For a salutary lesson in how to live the dream – day and night and under every possible condition, we’ll entrust our photographic enlightenment to a professional who has served as the European Pressphoto Agency’s West African Regional Chief Photographer since 2003.





Nic Bothma – An anthropologist by training, Nic’s work documenting the fall of apartheid alongside local and international photographic luminaries saw him become a professional photographer in 1995. Striking out on his own in 1997, he has covered the extremes of circumstance and the human spirit in more than 60 countries. The winner of numerous prestigious domestic and international awards, Nic has been a European Pressphoto Agency (epa) West African Regional Chief Photographer since 2003. Having sailed the Atlantic and Pacific – the latter solo, he retains his sense of equilibrium by shooting Africa’s largest waves at Dungeons off Hout Bay’s Sentinel Peak.

CHAPTER 10

FREEZE FLAME PHOTOGRAPHY

It’s all my wife’s fault. At 2 a.m. on Sunday I was woken by her exclaiming, “Aaargh! The mountain’s on fire.”

I swore at her for waking me up and tried to go back to sleep. Five minutes later, cogs started turning in my head and I realised it was no time to sleep!

From my balcony, I could see a massive swathe of clouds reflecting the light of an entire mountain in flames. As they raced over the mountain top in a strong wind, it was dramatic – Armageddon-like.

Ten minutes later I was on my off-road motorcycle – a crucial piece of equipment on this story, heading towards the light.

I followed ambulances into an old-age home in the midst of an evacuation as the fire marched relentlessly towards it.

For the next week, the fire raged in my backyard, so to speak – giving me a distinct ‘home-game’ advantage. I know the areas around the mountains above my home well, and using a motorcycle allowed me to get to where I thought would be best. The fire was burning on several fronts and establishing where the pictures would be was a challenge.

The scale and ferocity of this fire was unprecedented in Cape Town. The Cape is often referred to as the Cape of Storms as we are continually battered by strong winds. These winds cause a bush fire to rapidly turn into a raging, out-of-control inferno. The geography of Cape Town is also unique, with mountain ranges meandering through communities – making areas under threat varied and hard to predict.

Thick smoke filled valleys and gorges, and motocross goggles and surgical masks were crucial pieces of equipment.

Social media on this story (and many others it seems these days) did not really help, in my opinion. In terms of news reporting, there were so many inaccurate posts with people saying “It’s all over. We’re about to die” but, on arriving at their locations, I would find the fire still far away and not threatening at all! This happened all the time. Panic and rumour, thriving through the social networks, actually impeded the proper news reporting we needed.

Social media, in my opinion, was also to blame when some authorities did their best to block access to journalists. In this age of instant gratification, regardless of accuracy, everybody is a photographer. Working as a bona fide journalist is difficult. At each police checkpoint they had already turned away a hundred ‘photographers’ wanting to get pictures of the fire so, despite having the correct credentials, it was sometimes impossible to gain access.

On the fifth day, I received a fine for ‘failing to comply with management authority’ as I accessed an area beyond a police cordon. I guess it was the authorities’ special way of saying thank you for the awareness spread by photojournalists during the week.

On the positive side, communities worked well together to coordinate their efforts through neighbourhood watches on radio, liaising with fire and rescue personnel to most effectively direct resources. Communities spontaneously started collection points for food and water to replenish the firefighters.

A positive spin-off from our work was seeing a massive outpouring of contributions to an elderly couple I photographed who had their home destroyed. People phoned and mailed me for days asking for their contacts so they could donate. It felt good to have such a direct and positive effect from a picture.

As the smoke settled, I was left with a sense of awe and wonder at the power of nature and the humans who gave their lives in the fight to save plants, property, animals and other people. I salute all the firefighters – in particular, the extremely dedicated and talented pilots who battled the blaze. Without them, the outcome would have been far more severe.

My heart, thoughts and gratitude go out to the family of helicopter pilots Bees Marais and Darrel Rea, as well as crewman Jastun Visagie. Rest in peace, brave souls. You are the real heroes of this story.

Nic Bothma

AFTERWORD



Thank you for affording me the last word on the Muizenberg and Cape Point fires that swept Table Mountain National Park (TMNP) during March 2015.

I have been involved in integrated fire management for 35 years – on the Cape Peninsula and further afield – and, typically, after major incidents such as these, I’m asked if ‘this’ was the worst fire I’ve managed. Although the Muizenberg Fire was difficult to contain, I believe that any fire threatening the Wildland Urban Interface (WUI) holds potential for disaster. Much depends on prevailing weather conditions and whether homes ignite or not. When the WUI is not threatened and homes do not burn, wildfires are seldom regarded as newsworthy.

Under most conditions, our fire-suppression capabilities prevent the spread of wildfires before they reach the WUI and disaster is averted.

TMNP fire-suppression operations successfully control and contain 95 percent of all wildfires during the initial attack phase. Three percent of wildfires develop into extended attack and are contained in three to five hours. Two percent of wildfires, which occur principally during extreme conditions and escape initial attack operations, become major incidents. Where residential developments on the WUI are exposed to extreme wildfire conditions and homeowners have not paid adequate attention to their defensible space, i.e. their home and its immediate surroundings, built structures and people are endangered.

Because responsibility for preventing such fires falls largely on the property owner, I strongly urge residents living on the urban edge to address conditions within their defensible space.

Fighting fires of this magnitude requires dedicated staff members who are proud of their profession and lead by example. Fireline supervisors have to make decisions and take actions that determine whether fires are caught and contained or not; whether taxpayers’ money is used wisely or not and, at the same time, lead firefighters in a way that allows them to accomplish difficult tasks under dangerous and stressful circumstances.

I therefore want to thank my colleagues at SANParks, the CPFPA and the many other agencies that have assisted TMNP during this difficult and trying period for a job well done. I am immensely proud to be associated with a team of professionals possessing the leadership traits and skills essential to a high-risk profession like firefighting.

Lastly, I want to thank Capetonians for their generosity during those early weeks of March 2015. I want to thank all those who contributed and delivered foodstuffs and other commodities to the Newlands Fire Base and to the firefighters on the fireline. In my 35 years of firefighting, I have not witnessed appreciation on such a scale. It has left me searching for words and I must, in this instance, borrow those of a colleague from another province:

“This could only happen in Cape Town.”

Philip Prins

Fire Manager: Table Mountain National Park



Anni's song Noordhoek evacuee and music teacher Anne Middleton raises the spirits of fellow displaced residents by providing entertainment for them on Noordhoek Common.

THE CAPE AFLAME PROJECT

The Cape Aflame began as an idea floated on the *Cape of Storms Photography and Meet Ups* Facebook page, started by Cape Town photographer Gale McCall in February 2014.

In April 2015, a small group of photographers sharing a passion for the Cape coalesced around the notion of volunteering its skills to produce a permanent record of the Muizenberg Fire of March 2015. Its intent was to raise funds for organisations that worked to contain and suppress the fire before dealing with its inevitably costly consequences.

Serving as a catalyst, VWS Marketing Director Patrick Ryan put the nascent project in touch with a like-minded group, led by Les Martens of SA Media Services. Sharing Mike Golby's vision of locating the Muizenberg Fire in the context of our common past, present and future, *The Cape Aflame* Project and Support Teams were born.

Publishing, be it for worthy causes or profit, sets exacting standards of quality, accuracy and attention to detail. Nobody meets these criteria better than Les. He shared a vision, took on risk, sourced needed skills, participated in every aspect of the project, nursed the book through the publishing process and, finally, put it into your hands.

From the outset, Kate Dearlove of Getty Images offered access to world-class imagery, Kathleen Sutton provided a subeditorial and proofreading raptor's eye, and Paula Wood's masterful design and layout skills turned piles of data accompanied by hundreds of images into a work of art.

Moreover, without extreme adventurer and eco-warrior Braam Malherbe's passion for the project, we would not be in a position to bring it to your attention.

As Capetonians lacking knowledge and experience of wildfire, wildland firefighting or the unique environment through which the Muizenberg Fire raged, *The Cape Aflame* Project Team swiftly discovered that vision demands leadership.

Our Project Manager and Business Lead Kevin Gleeson's extraordinary ability to lead from the front has earned him the greater team's gratitude, respect and friendship. Without Kevin's work ethic, business insight, compassion and innate abilities to lead, plan and delegate, we would not have a definitive record of the Muizenberg Fire.

The Project Team researched, collected and curated existing material. While Mike Golby sourced and researched documents and papers in the public domain to produce editorial, curator Patrick Ryan's wide-ranging firefighting, photographic and design skills smoothed the vetting process, undertaken by experts in their respective fields, and gave the team a highly innovative and creative social-media marketing campaign.

Basil Parker and Cathy Bell undertook the daunting task of sourcing and curating thousands of images from hundreds of photographers – their job made more difficult by having to obtain high-resolution images of world-class quality that would match the vagaries of the conflagration and the text. With Ant West providing early input into the marketing campaign before having to step down, Basil took over to plan its realisation by setting up a web platform able to support an integrated media campaign that will serve as a means of communication between our community and our major beneficiaries, with whom the Project Team has formed strong ties.

To say that the team could not have completed this project without the support of their partners would be to wholly understate our partners' commitment to a quest seeking to protect our peninsular and broader biodiversity.

During the Muizenberg Fire of 2015, Capetonians and many others accomplished the seemingly impossible. Little did *The Cape Aflame* Project and Support Teams realise that, to commit the work of Capetonians and so many others to the record, they would have to emulate them.

Yet again, we were led by example.

OUR BENEFICIARIES

Cape of Good Hope



Cape of Good Hope SPCA Wildlife and Horse Care Units

For the past 143 years, the Cape of Good Hope SPCA has prevented cruelty to animals through education, law enforcement and veterinary care services – operating an Animal Hospital, Inspectorate and four Mobile Clinics serving impoverished communities. Their Adoption Centre, Farmyard, Horse Care Unit and Wildlife Unit provide safe havens for injured, stray and abandoned animals, and find loving homes for hundreds of animals every year. The 24-hour-a-day availability and refreshing professionalism of the Wildlife and Horse Care units during the Muizenberg Fire highlighted a dire need of public funding. Our assistance will provide vital equipment needed for the rescue of wild animals and horses.

If we care for our animals, we must care for those who provide them care.



Cape Peninsula Fire Protection Association

The first Fire Protection Association formed in the Western Cape province, the Cape Peninsula Fire Protection Association (CPFPA) plays the lead role in promoting and implementing integrated wildfire management across the Cape Metropole, including TMNP.

Integrating key resources, the CPFPA enables landowners, wildfire firefighting organisations and authorities at a national, provincial and local level to preempt, prevent, fight, control, mitigate and rehabilitate the ravages of increasingly large short-interval wildfires that pose a grave threat to our Fynbos Biome.

A low-profile, self-reliant, statutory Public Benefit Organisation, the CPFPA needs our help to carry out much-needed research into more effective ways of combatting and managing wildfire.



SANParks Honorary Rangers: Table Mountain Region

SANParks Honorary Rangers (SHR) is a national volunteer organisation and key SANParks strategic partner.

SHR: Table Mountain Region (TMR) comprises a dedicated, qualified membership that does far more than behind-the-scenes work immediately benefiting our ecology and TMNP visitors by, for example, raising funds for boardwalks and providing TMNP logistical and other support. It has, for many years, dedicated itself to physically restoring our endangered Fynbos Biome through innovative long-term programmes of action.

Funds raised from sales of this book will be used, without administrative cost, to expand the TMNP Safety Dog Unit and enhance visitor safety, as well as continue post-fire infrastructural and environmental rehabilitation.



Volunteer Wildfire Services

Volunteer Wildfire Services (VWS) provides highly motivated, trained and skilled operational, logistical and planning wildfire firefighting personnel to its partners – including SANParks TMNP.

VWS's primary objectives are to suppress wildfire, preserve our fragile biodiversity and protect our water catchment areas. Public awareness of this key component of our integrated wildfire firefighting strategy reached unprecedented highs during the 2015 Muizenberg Fire and succeeding wildfires, and it received substantial support – enabling it to cover its operating costs through the current wildfire season.

However, if VWS is to maintain the safety of its members on the firelines, develop much-needed infrastructure and grow to its full potential as an essential, self-sustaining public resource, it remains in critical need of continued financial support.

ACRONYMS

ACSA	Airports Company of South Africa	ICP	Incident Command Post
BMT	Baboon Management Team	ICS	Incident Command System
BRU	Baboon Research Unit	NCC	Nature Conservation Corporation
BTT	Baboon Technical Team	NIMS	National Integrated Management System
CAPE	Cape Action for People and the Environment	NSRI	National Sea Rescue Institute
CoGH	Cape of Good Hope	SANBI	South African National Biodiversity Institute
CPES	Cape Peninsula Environmental Services	SANDF	South African National Defence Force
CPPNE	Cape Peninsula Protected Natural Environment	SANParks	South African National Parks
CPFPA	Cape Peninsula Fire Protection Association	SARDA	South African Riding for the Disabled Association
CSA	Conservation South Africa	SPCA	Society for the Prevention of Cruelty to Animals
CSIR	Council for Scientific and Industrial Research	TMNP	Table Mountain National Park
CTFRS	Cape Town Fire and Rescue Services	TMR	Table Mountain Region
DWAF	Department of Water Affairs and Forestry	UNDP	United Nations Development Programme
EPWP	Expanded Public Works Programme	UNESCO	United Nations Educational, Scientific and Cultural Organisation
FITT	Fire Investigation Task Team	VWS	Volunteer Wildfire Services
FMP	Fire Management Plan	WCDMC	Western Cape Disaster Management Centre
FPA	Fire Protection Association	WfW	Working for Water
GEF	Global Environment Facility	WoF	Working on Fire
HWS	Human Wildlife Solutions	WUI	Wildland Urban Interface
IAP	Incident Action Plan	WWF	World Wide Fund for Nature

PHOTOGRAPHIC INDEX

Without the generosity of the photographers indexed here, this book would not have been published and we Capetonians would not be in a position to assist our chosen beneficiaries.



Cover
Darren Stewart
Ref number: CA_001



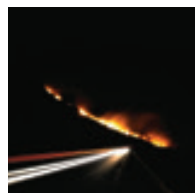
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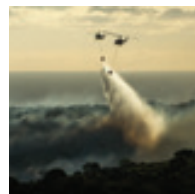
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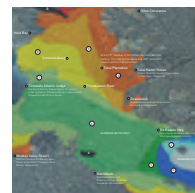
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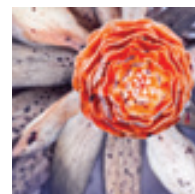
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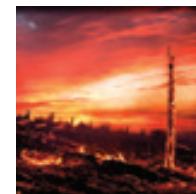
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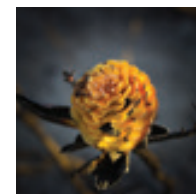
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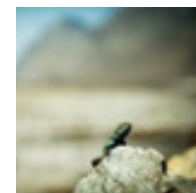
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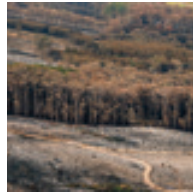
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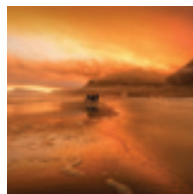
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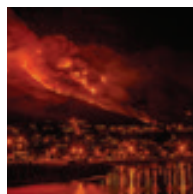
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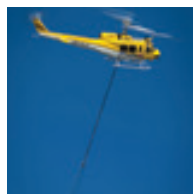
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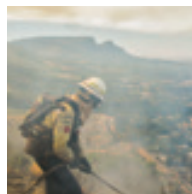
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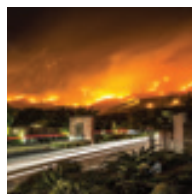
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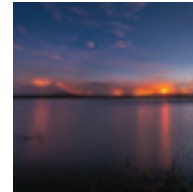
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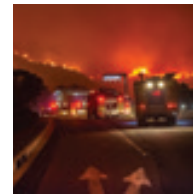
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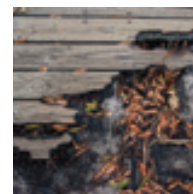
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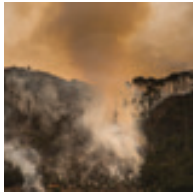
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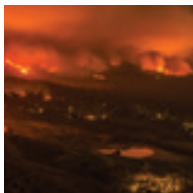
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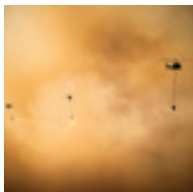
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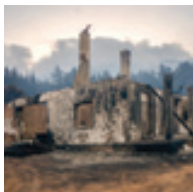
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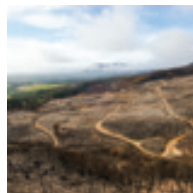
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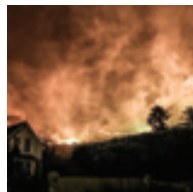
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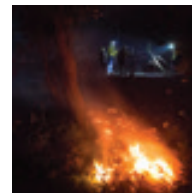
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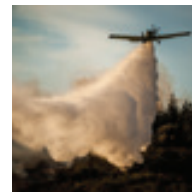
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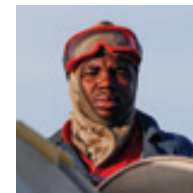
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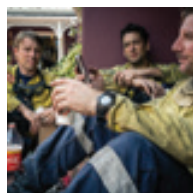
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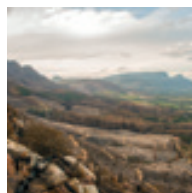
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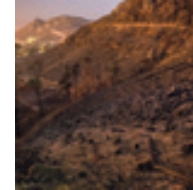
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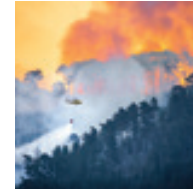
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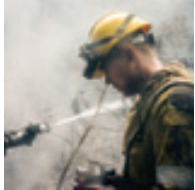


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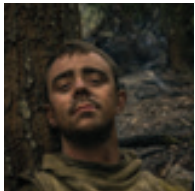
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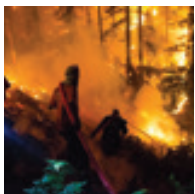
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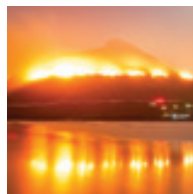
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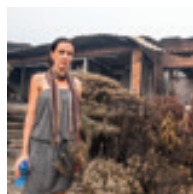
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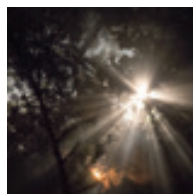
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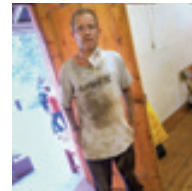
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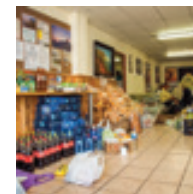
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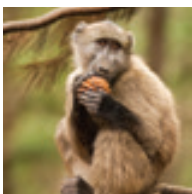
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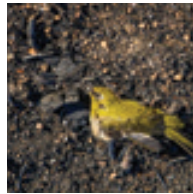
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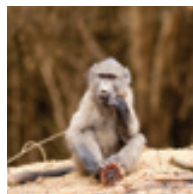
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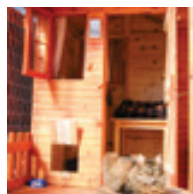
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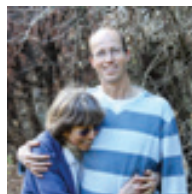
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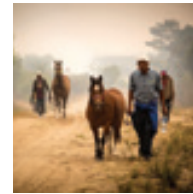
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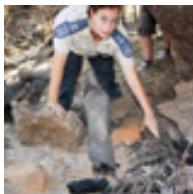
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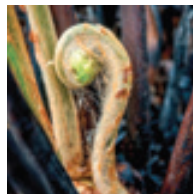
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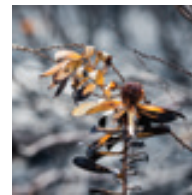
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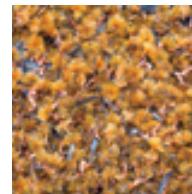
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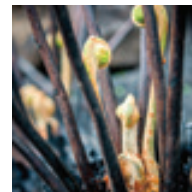
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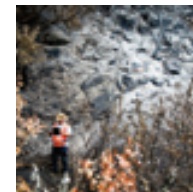
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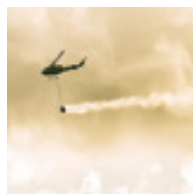
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Following the Muizenberg Fire of 2015, the largest in recent recorded history, an eclectic group of South Africans coalesced around a common cause. Realising their country and city had the skills, organisational abilities and infrastructure needed to support Table Mountain National Park's integrated fire-management plan – capable of sustaining Cape Town's biodiverse ecological balance – they recognised an age-old problem.

Those who, ceaselessly and tirelessly, freely give their time and special skills to perform an essential service benefiting South Africans and the world, lack the money and equipment to do their job safely and successfully.

Motivated by the spirit shown by their fellow citizens in controlling a necessary natural phenomenon capable of pitting Capetonians against their rich natural heritage, the group set out to not only record the Muizenberg Fire, but to deliver to all South Africans their collective history of unity in the face of adversity.

The photographers, writers, project leads and publisher of *The Cape Aflame* will not benefit financially from the proceeds of this book. Those in constant need of resources to continue maintaining – voluntarily – the delicate ecologies of a modern, world-class city hard up against a pristine natural environment, will.

They lead us all. By example.

THE CAPE AFLAME

CAPE TOWN'S DANCE WITH FIRE

On the face of it, *The Cape Aflame* uses stunning photography to chronicle the story of Capetonians uniting to fight a wind-driven holocaust which, over several days in early March 2015, torched 5,120 hectares of Table Mountain fynbos, as well as four homes and an upmarket coastal resort.

It is a story of courage, innovation, ingenuity and indomitable spirit facing down an existential threat. Individuals and communities from across the Cape and elsewhere came together to save their mountain and their city from the most volatile and destructive manifestation of Mother Nature.

This much-needed book constitutes a graphic, permanent record of a significant event in Cape Town's long, incident-filled history.

On the face of it.

The Cape Aflame is far more than mere story or photographic record. As with a photograph made by a master of the art, its composition, subject and stark contrasts portray more than an uplifting moment in the life of a city endowed with a national park as its backyard. Like any good image, it demands its readers' consideration and rewards them richly for it.

Drawing on the experience of Table Mountain National Park management and personnel, wildland firefighters, environmentalists, academics and fire-management practitioners, *The Cape Aflame* revisits the first days of March 2015 to explore the benefits of fire to fynbos; competing fire-management policies dating back to the 19th Century, and local, provincial and state firefighting initiatives dominated by the social and political climes of their times.

Moreover, as the fynbos of Table Mountain National Park rejuvenates, this work seeks not to reinforce the separation of city dwellers from their birthright; it offers irrevocable proof that the unity demonstrated during those days of fire and fear exemplifies the spirit we need to ensure our continuing, sustainable coexistence with our greatest assets – our iconic mountain, its flora and its fauna.

All monies realised by the sale of *The Cape Aflame* will go directly to funding much-needed resources required by our wildland-firefighting and animal-rescue services.

www.capeaflame.com

