

## Knysna wildfire - alarming herald of the inferno to come



by Evelyn John Holtzhausen

Paul Gerber has a massive task on his hands in the wake of the wildland fires that, in a matter of hours on the night of June 6 and June 7, transformed the picturesque Garden Route from Sedgefield in the south to Plettenberg Bay in the north, into a frenzied 60 km inferno of death, destruction and terror.

The fire, a provincial disaster, in an area referred to in tourist brochures as the "paradise" of South Africa resulted in the largest deployment of firefighting resources and firefighters in a single incident in South Africa.

In the overnight inferno, seven people were burned to death, close to 1200 homes were destroyed and 360 were damaged. The flames all but consumed 17,800 hectares of fynbos, natural forestry, including 10 000ha of plantation and coastal bush - and decimated an estimated 3 million strong population of honey bees.

Almost 1 000 fire fighters, 78 fire vehicles and 20 aircraft - from water bombers to helicopters and fixed wing "spotter" aircraft- were deployed to fight the fires. And while the immediate drama of the fire is over for the residents of the region, the work for Paul, General Manager of the Southern Cape Fire Protection Association (SCFPA) and his colleagues, has just begun.

Now Paul and his colleagues have an almost impossible task. They have to do all they can to prevent the same thing from happening to all the farms, towns and villages that fall under the domain of the Southern Cape Fire Protection Association.

That is towns, villages and communities in an area of about 8 million covering the whole of the Eden and Central Karoo District Municipality, including the Tsitsikamma, Langkloof and Baviaanskloof in the Eastern Cape.

Ironically, the wrath of flames that all but consumed Knysna and its neighbours, may yet be Paul's best ally in promoting the concept and implementation of an Integrated Fire Management (IMF) strategy.

This strategy is aimed at helping to reduce the propensity of unwanted wild fire from doing exactly what it did in Knysna in June - kill people and kill livestock, destroy homes, raze wilderness and agricultural land to a scorched, soot-blackened desert.

It is not that Paul and his colleagues in the broad church of fire prevention - from provincial and municipal Fire Chiefs to NGO's concerned with fire and wildfire management - have not been doing their job; they have.

The trouble is that not many people have been listening. And the sadness that hangs over Paul, his SCFPA colleague Dirk Smit and all the professional firefighters in the region like an ominous and oppressive cloud of smoke, is that if more landowners and homeowners had been listening, the destruction wrought by the Garden route inferno could have been reduced.

Paul, his fire fighting colleagues, pyrologists, scientists, agronomists, landowners, bee keepers and virtually every Tom, Dick and Harry who was there those fateful days and nights know that the fires could not have been halted.

They know as well that this was not an unprecedented event. They know that this is the new normal; that given the prediction of hotter, drier conditions thanks to global warming, unwanted wildfire on the scale of the Garden Route fire will happen again - and again.

And unless steps are taken to reduce the new fertile "opportunity" for fire to take hold, globally, we can expect more of the same, more often.

On June 6, once the gale force wind took the flames in its teeth and sprinted, gusting at more than 110km an hour, 60 km from Sedgfield to the southern borders of Plettenberg Bay there was simply no hope in hell of stopping it.

Boosted by "energy" drinks of drought- dried wood, thick crispy beds of dry leaves, a tangle of volatile invasive alien vegetation and, not least fynbos, which loves to burn, all anyone could do was get out of its way as fast as they could and stare back in despair as it consumed everything in its path.

Bolting out of the starting blocks in the Hoogekraal area on the Barrington road, with the gale force wind as a propellant, the fire sprinted towards Rheenendal and the Phantom pass area, crossed the N2 and headed towards Belvidere, Brenton-on-Lake and Brenton-on-Sea burning homes, melting street signs and consuming everything in its way.

While that swathe of flame sped on to the Featherbed Nature Reserve on the east head, other fires raced to Knysna Heights and beyond. All in all, 263 homes in Knysna Heights were burned to the ground or severely damaged, and in the nearby White Location, 259 homes were damaged or destroyed.

A measure of the fury of flames that night was that the fire "jumped" the Knysna Heads, vaulting in a cloud of "crowning" sparks from Featherbed on the west head to the east head, where nature took control, halting the flames in the fire retarding Afro montane forest that clambers up from the sea to the East head.



Further north, the flames jumped across a 4.5 km wide firebreak.

The common thread in all the conversations, from experienced firefighters to Knysna street and coffee shop chatter, is the frightening speed at which the wave of flames, at times leaping higher than a three story building, came tearing towards its prey - a fury when, in the words of one fire fighter, "this fire monster" came to town.

Local historians called the fire unprecedented. Others said the Garden Route has never known a fire like it in living memory. They are right. But those who predict that it will never happen again are wrong.

According to pyrologists, climate scientists and environmentalists around the world who study fire behaviour and global weather patterns, the conditions that gave rise to the fires are the new normal.

Runaway wildfire is no longer exceptional and no longer a rare once in a lifetime event.

While it is true that a certain set of circumstances conspired to create the firestorm on June 6 and 7 along the garden route, the separate elements such as hotter drier weather, a dearth of rain, drought, and strong winds are here to stay.

Experts agree that there were a number of factors that made this Garden Route fire the "perfect fire storm".

They include a sustained drought, an exceptionally high "fuel load" (an accumulation of dry wood, ground leaves, dry scrub hot dry "berg" winds which preceded the firestorm, the speed of the wind on the day and dry lightening and firebrand showers to "ignite" the tinder dry fuel load.

Then there is the human factor; lack of fire preventing measures of agricultural land, people not creating "defensible spaces" around their homes or taking basic fire prevention steps in the construction of their homes, implementing "FireWise" practices that can dramatically reduce the risk of loss caused by unwanted wildland fire.

Globally, it is the same.

Similar conditions prevailed in central Portugal where, on June 17, in what has been described as the worst wildfire the country has ever experienced resulted in the death of 64 people and destroyed thousands of ha of plantation.

That fire started when "dry thunderstorms" in very hot, humid conditions sparked the wildfire that took 1600 fire fighters and 350 soldiers days to bring under control.

In Chile in February, a raging fuel load "empowered" wildfire claimed 11 lives and destroyed close to 2 000ha of forest and wilderness. The fires were ignited in exceptionally hot conditions and fanned by strong winds after a drought that lasted almost a decade.

And the list goes on, California, Arizona, Australia, Indonesia - all united by the horror of unprecedented wildfire.

This is precisely where Paul and his colleagues come in. Their task is to convince landowners that these circumstances are no longer exceptional; this is the new normal.

And the most frustrating aspect of the Garden Route inferno is that fewer lives could have been lost, many homes could be saved and the "monster" could have been curtailed in its tracks a lot earlier and if not halted, at least contained

The message that the Garden Route inferno must teach is that landowners and homeowners must take precautions, and put measures in place that will starve unwanted wildfires of the fuel that feeds them.

"We can't do anything about the weather," says Paul. "But landowners and homeowners can do a lot to prevent another "perfect storm" by implementing the lessons of IFM, and do all in their power to reduce the risk of wildfire spreading through and razing their property.

Integrated Fire Management demands a series of actions that include: developing a keen sense of fire awareness; undertaking fire prevention strategies that include prescribed burning, house "hardening" and fireescaping, resource sharing; and coordination. It also prescribes measures for early fire detection, fire suppression, reviewing fire damage rehabilitation, and to support research at a local, provincial and national level.

"This results in creating a sustainable and well-balanced environment, reducing wildfire damage and promoting the beneficial use of fire," says Paul.

High on the list of priorities is the clearing of the highly inflammable fuel load of invasive alien vegetation that is manna from heaven for wildfire.

Residents of the Garden Route speak of pine trees "crowning" at the height of the fire rocketing balls of fire into the air, propelled by the wind to start new fires.

Yet, while Fire Protection Associations are legally constituted in terms of the National Veld and Fire Act of 1998 and carry huge benefits for members - such as support for invasive alien clearing, the preparation of fire breaks, the strategic routine of controlled burns and implementation of integrated wildfire management protocols, not all landowners deem it necessary to become members.

And then there are defensible spaces, says Paul.

The easiest way to describe this is to imagine a fire "climbing" a ladder left propped up against a wall into the roof of a house. Had there been no ladder; no fire. Just cleaning out your gutter before fire season can avoid burning embers collecting and setting your home alight.

On a drive through Sedgefield, Brenton-on-Sea and Knysna it was easy to identify the homes that had "ladders" of trees, leading into their property along which the fire climbed into homes. And while the clearing of "defensible spaces" may not have prevented all the damage to private property in the Garden Route fire, it is a certainty that far fewer homes would have been lost had the vegetation around them been cleared.

In the end, however, if any benefit is to be derived at all from the Garden Route inferno, it must be that this is a "wake up" call to landowners, communities and not least local, provincial and national government.

Given the reality, in these times of global warming, that this is the new normal, no one can continue to do what they have always done (or not done, as the case may be) and expect a different result.

Funds must be allocated on state, provincial and municipal level to allow Paul and his colleagues in Fire Protection Associations across South Africa to do their work.

Local landowners and homeowners need to take responsibility for their risk and take action to reduce fire hazards.

"Spreading the word about Integrated Fire Management is the crucial role of any Fire Protection Association (FPA). We do our best to reach as many landowners as possible, whether on small holdings, massive farms, at nature reserves or in the wildland urban interface areas. But we are severely limited in our work by a lack of funding.

"Now more than ever, we need the help of our members to encourage other landowners to join their local FPA and spread IFM and FireWise awareness so that we can all work towards preventing these devastating, unwanted wildfires from burning unchecked across South Africa', says Paul.

FireWise promotes "firescaping" properties, ensuring that landscaping is done in a manner that reduces the probability of ignition and the spread of wildfire.

"We also need to assist local communities to become more aware of the risks of fire. We need to support them to be proactive in reducing the threat posed by unwanted wildfire and train them to act as a first response to fire emergencies', says Paul.

"Through greater awareness, fewer ignitions will result in fewer fires and faster suppression of those fires that will inevitably become a regular feature of life in this new normal of global warming. We need to control the environment to make it less welcoming to fire and far more safe for life." he concludes.

From Paradise lost in fact to Paradise found.

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