

BIOPHILLIA

A HUMAN RESPONSE

TEXT & IMAGES: NICHOLAS CARROLL

Negative ions explode around your feet and the last thing on your mind is the water bill. You hang your head open mouthed in relief and wish you could spend the rest of the morning holding up the walls of the shower. Soft, warm needles pummel your scalp as peace washes over you.

SO IF FALLING WATER PROVIDES NEGATIVE IONS FOR OUR WELL-BEING, WHAT DO FORESTS AND PARKS PROVIDE?

What exactly is it in nature that brings relief to our overburdened systems? Oxygen is one answer. Contrary to popular belief though, cutting down all the trees would not mean instant suffocation for man and animal-kind. There will be problems with our atmosphere, but we would be OK for a while at least. Our atmosphere comprises 20.95 percent oxygen to be exact. 50 to 85 percent coming directly from our oceans - only a small percentage is attributed to trees.

Known for decades, but little publicised, trees continually emit oils to protect themselves from germs and disease. When breathed in, these oils called Phytoncides, boost our immune system. They are also quickly absorbed through the skin. Phytoncides will immediately reduce our stress levels and increase feelings of well-being. That's just for starters - the list of other positive effects goes on and on.

Our bodies possess cells called Natural Killers (NK cells). These NK cells defend our bodies from cancer and viruses. It has been discovered that when a proliferation of Phytoncides are present in our bodies (when you spend time in the urban forest) the number of NK cells increases dramatically, supporting our bodies rejecting tumours and virally infected cells.

So powerful are Phytoncides (there are over 5000 different substances that fall into the category) that the Japanese developed an entire therapeutic model around them called Shinrin-Yoku (forest bathing). You can experience this therapy anywhere there is a presence of trees - such as a park or garden. Simply kick off your shoes and open your senses to nature - breathe in the aromatherapy of the Phytoncides from the trees, feel the grass under your feet, the breeze on your skin and natural light dancing on the surface of your eyes - Shinrin-Yoku - you've awakened the Biophilic response.



During the reading of this feature, you may experience a mild Biophilic response. Biophilic refers to the innate desire we all possess to connect with nature - running water, trees, uneven lines and patterns. Natural stuff. Phobias repel us. Philias attract us - in particular, to all things natural. Any environment with trees, triggers a strong Biophilic response. Your response in a forest is going to be well off the charts!

01

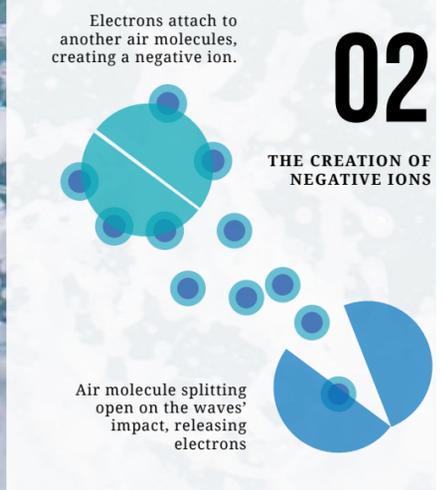
PHYTONCIDES
Oils emitted from trees to protect them from germs and disease.

Negative ions will get you every time you're near crashing water - waves at the beach, a waterfall, pouring rain and the shower. The force of splashing water causes air particles to split, freeing electrons which attach to other air molecules causing a negative charge. It's one of the reasons why surfers are so chilled. These are the good ions despite their negative charge. Still going to berate the kids for taking endless showers?

**OVER A 100 000
NEGATIVE IONS PER CUBIC
CENTIMETER CAN BE IN
THE AIR AROUND A BIG
WATERFALL**

**LESS THAN 100 NEG
IONS PER CUBIC
CENTIMETER CAN BE
FOUND IN BIG CITIES**

**BETWEEN 2000 AND
4000 NEGATIVE IONS CAN
BE FOUND IN A CUBIC
CENTIMETER OF BEACH AIR.**





03

A BIOPHILIC EXPERIENCE

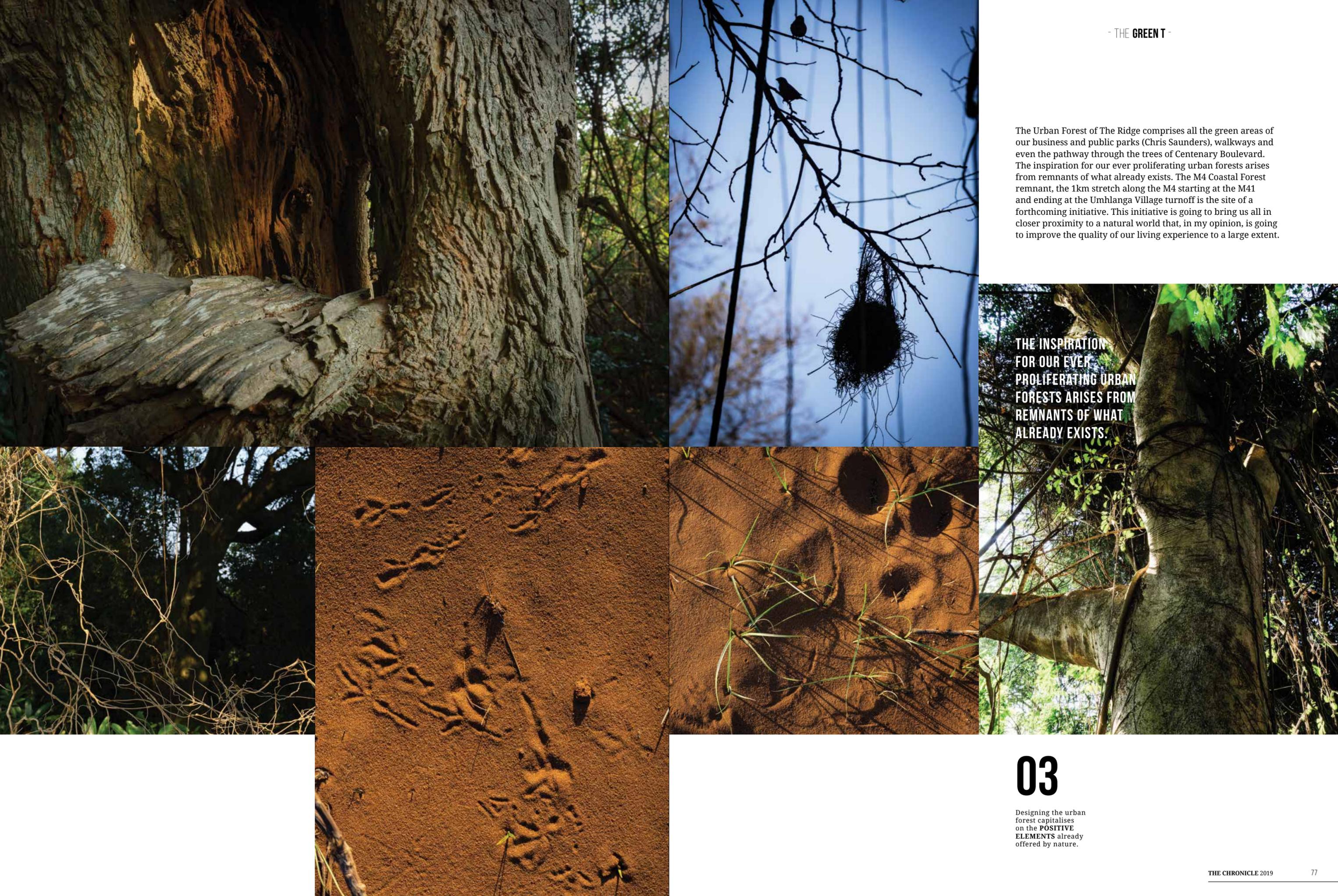
At 800MB, these images contain extreme detail, and, little, if any degradation of pixels. The foliage in front of the scene is as sharp and detailed as the foliage 70 feet away in the background. They are designed to be printed at around 6m and will cause a mild biophilic response in viewers coming into contact with it..

The Urban Forest of The Ridge comprises all the green areas of our business and public parks (Chris Saunders), walkways and even the pathway through the trees of Centenary Boulevard. The inspiration for our ever proliferating urban forests arises from remnants of what already exists. The M4 Coastal Forest remnant, the 1km stretch along the M4 starting at the M41 and ending at the Umhlanga Village turnoff is the site of a forthcoming initiative. This initiative is going to bring us all in closer proximity to a natural world that, in my opinion, is going to improve the quality of our living experience to a large extent.

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03

Designing the urban forest capitalises on the **POSITIVE ELEMENTS** already offered by nature.





IMAGINE FINGERS OF GREENERY STRETCHING UP FROM THE M4 COASTAL FOREST LIKE HAIR EXTENSIONS, TOWARDS THE RIDGESIDE SKYLINE.

These extensions of trees and foliage will provide shadow for cyclists, runners and walkers using purpose built pathways that will traverse the area. This urban forestisation will cause a decrease in air temperature and generate purer water. An outdoor amphitheatre is planned for the lower section close to the M4, bringing local and international artists together in a magical and atmospheric evening setting under the stars.

Parks for children and outdoor gyms will too form part of this new landscape. For the birdwatchers; elevated walkways will penetrate the forest remnant bringing us shoulder to wing with a myriad of sub-tropical and migratory bird species.

To complement the new and improved landscape, the residential developments underway at Ridgeside will have tree lined roadways connected directly to the forest.

DEVELOPED BY NEWTOWN LANDSCAPE ARCHITECTS, THE "GREEN T" WILL BE A FULLY FUNCTIONING ECOSYSTEM



Man-made streams, dams and ponds will form the urban river, without which, the urban forest would not survive. The urban river of The Ridge already exists in the form of storm water runoff into an intricate system of holding reservoirs that are at the core of The Ridge's self-sustaining irrigation system. This area at the foothill of Ridgeside will be known as the "Green T" and work to bring it to life is already underway. More wildlife will be encouraged into the area, as such, green corridors will be established to support this drive. You'll be able to spend time at the visitors centre to learn about wildlife species and how the urban forest affects our well-being. To enjoy a picnic with family and friends in safety, to get physical, or just be. We are, after all, human beings.

As we live close to the ocean, the intention is to channel "sea" air, up to and over this urban forest (hopefully carrying negative ions (the good ones), so we can experience a truly blue green biophilic response. We know that future generations are going to live much longer than us (apparently the first human destined to live to the age 200 has already been born). It is likely that the reforestation of our towns and cities is essential to longevity on this scale.

Developed by Newtown Landscape Architects, The Green T will be a fully functioning ecosystem. People will be brought together with nature through a network of regenerated ecological components which enhance the social aspects of the areas open spaces. A network of interconnected and integrated public environments.

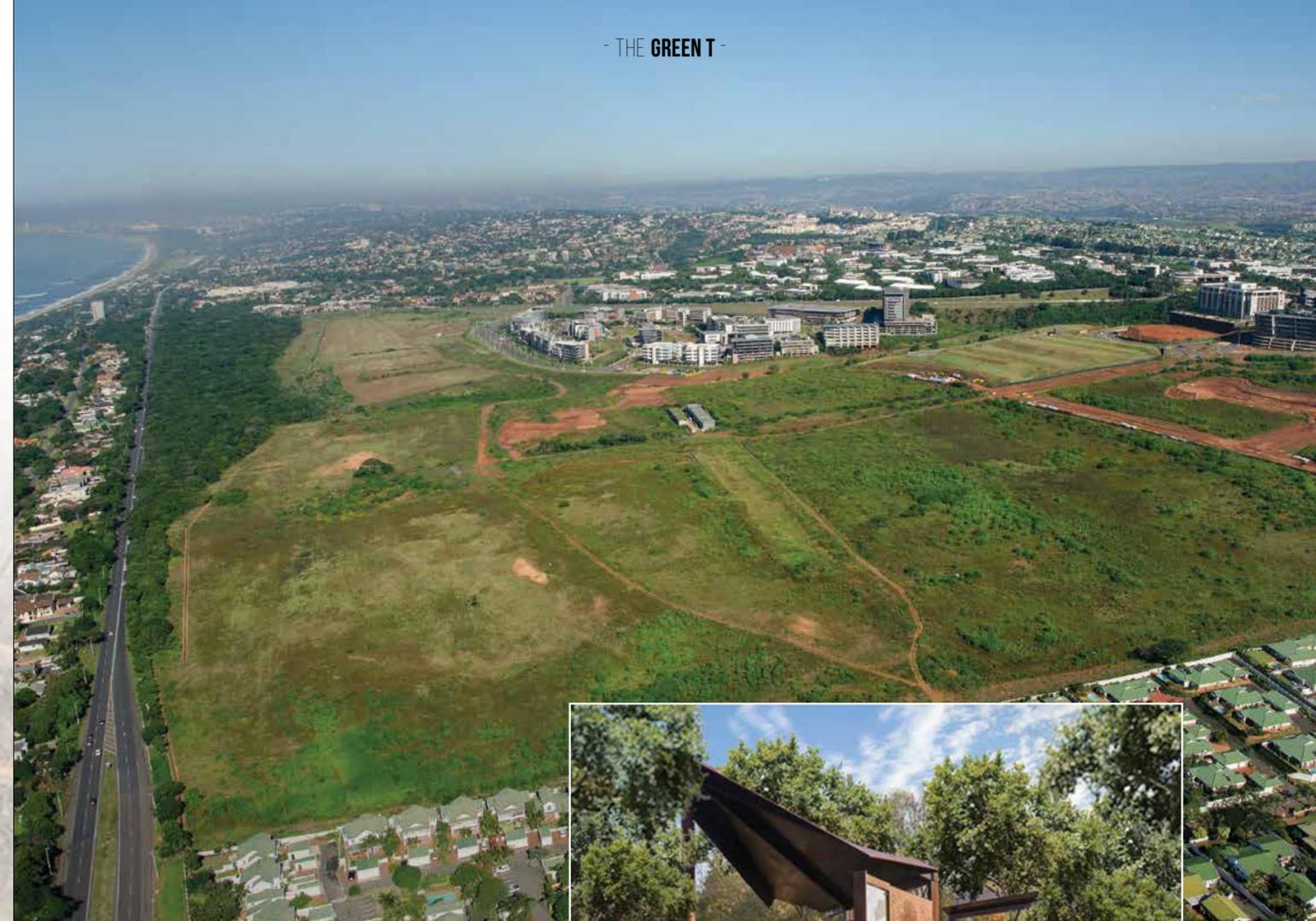
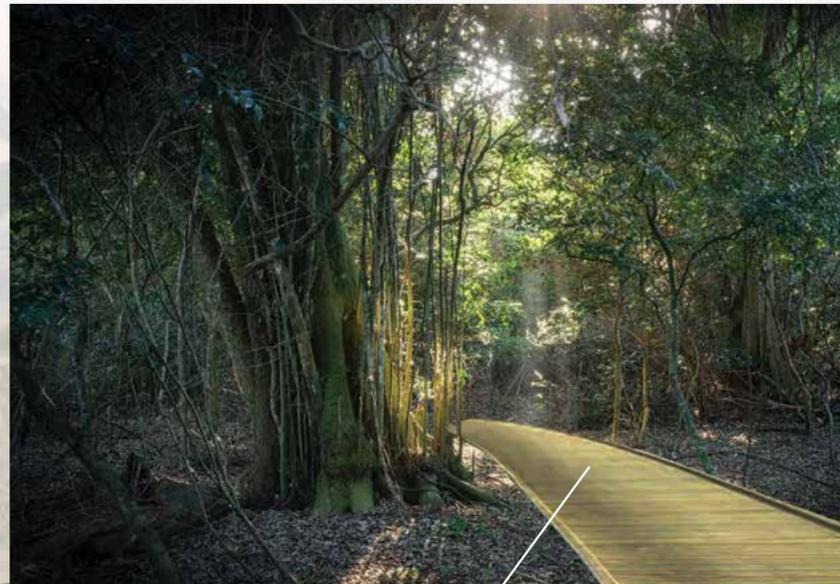


Designing the urban forest capitalises on the positive elements already offered by nature. Perhaps not the best forum to bring up the subject of money, it is worth pointing out however that the forestation of our town is going to greatly augment the value of the area which is already showing phenomenal growth beyond anyone's expectations.

These urban forest initiatives are not without challenge. Its long been realised that man spent the best part of the century "sealing" the planet, with concrete and asphalt, in an effort to dampen down the earth so we don't have to deal with it. The drive now is to create "sponge" towns and cities where these previously sealed tracts of land are once again opened up, allowing the earth to permeate through the man-made deck.



Bird images supplied by Roger Hogg



MORE WILDLIFE WILL BE ENCOURAGED INTO THE AREA, AS SUCH, GREEN CORRIDORS WILL BE ESTABLISHED TO SUPPORT THIS DRIVE

