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Kruger National Park

SOUTH AFRICA

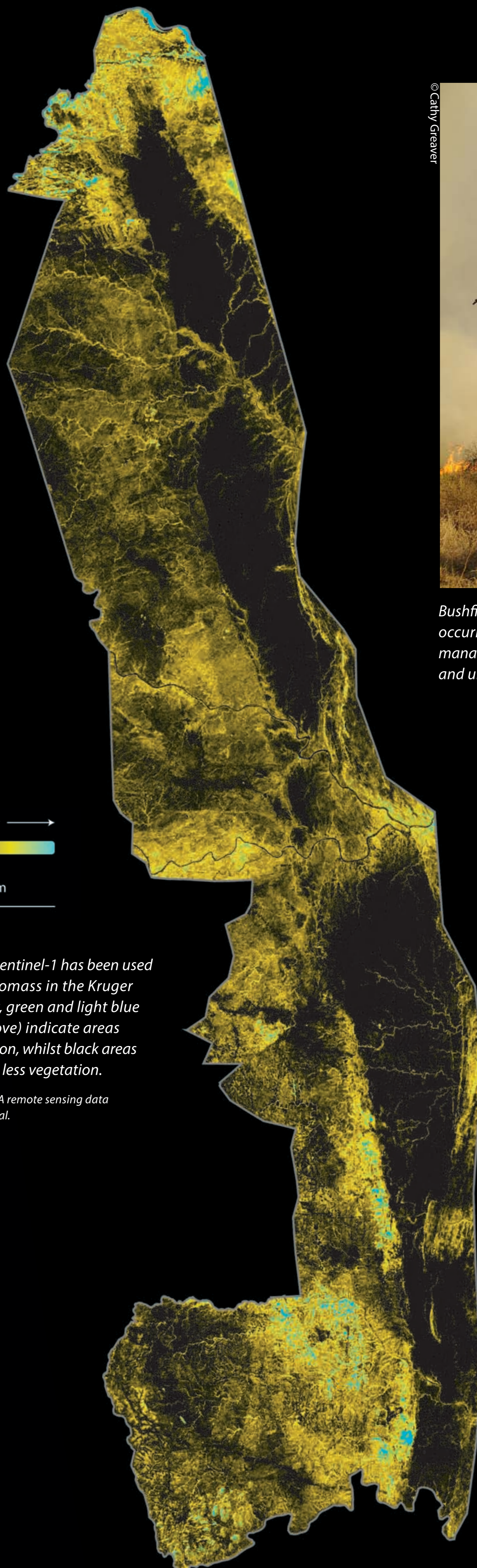
Elephants are one of the most charismatic species found in Kruger, and play an important role in regulating the ecosystem. In recent years, elephant numbers have increased in the park.

Kruger National Park is located in north-eastern South Africa and is the country's largest national park, attracting over 1.8 million tourists every year. The park extends over close to 2 million hectares (about the same size as the country of Wales) and has an impressive diversity of trees, birds, insects and mammals, including the famous 'Big five': elephant, lion, rhinoceros, buffalo and leopard.

Kruger National Park is a savanna, which is characterized by a mixture of grasses and trees, neither of which ever manages to totally outcompete the other. Droughts, fires and herbivores (especially elephants) are nature's way of maintaining this patchwork of trees and grasses.

While Kruger National Park is still largely an intact and natural landscape, it does need to be managed. For example, the park's managers influence fire regimes and manage water supplies and fences, which affect herbivore populations and movements. Management actions should, however, be careful in providing either trees or grasses a competitive advantage, since it is precisely this mixture that ensures the park's rich diversity in plants and animals.

In order to monitor whether this mixture is being maintained over millions of hectares, projects such as ECOPOTENTIAL are using Earth Observation technology as the 'eye in the sky'. By mapping and monitoring grasses and trees, this technology is helping researchers to understand the pattern of changes over time and feed this information back to the park managers.



Tree Biomass →
30 km

Information acquired by Sentinel-1 has been used to measure the woody biomass in the Kruger National Park. The yellow, green and light blue colours in the image (above) indicate areas with more woody vegetation, whilst black areas represent open areas with less vegetation.

Biomass model produced from ESA remote sensing data (Sentinel-1) by CSIR for Ecopotential.

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Bushfires are a common, natural and important occurrence in savannas. Both lightning and management fires create a patchwork of burnt and unburnt areas.



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The iconic baobab trees are found in the north of Kruger National Park.



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A mixture of open and dense habitats creates habitats for a range of species with different requirements. For example, cheetahs prefer mostly open habitats for hunting.



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Due to the size of Kruger National Park, many natural processes like predation and scavenging are still largely intact.



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