KUDZILLA

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KUDZILLA:

An ethnobotanical monster myth

Casey Lance Brown

Opposite: This kudzu patch in Asheville, western North Carolina, US covers an eroded embankment with a broad mix of native and non-native species.
Credit: Casey Lance Brown

Right: This mountain gap in Royal Gorge, western North Carolina, US historically served as a transport entry path. In spring, the kudzu emerges from its starchy underground tubers. In summer, kudzu rapidly fills the voids and edges during the growing season before dying back seasonally.
Top: Spring.
Bottom: Summer.
Credit: Casey Lance Brown

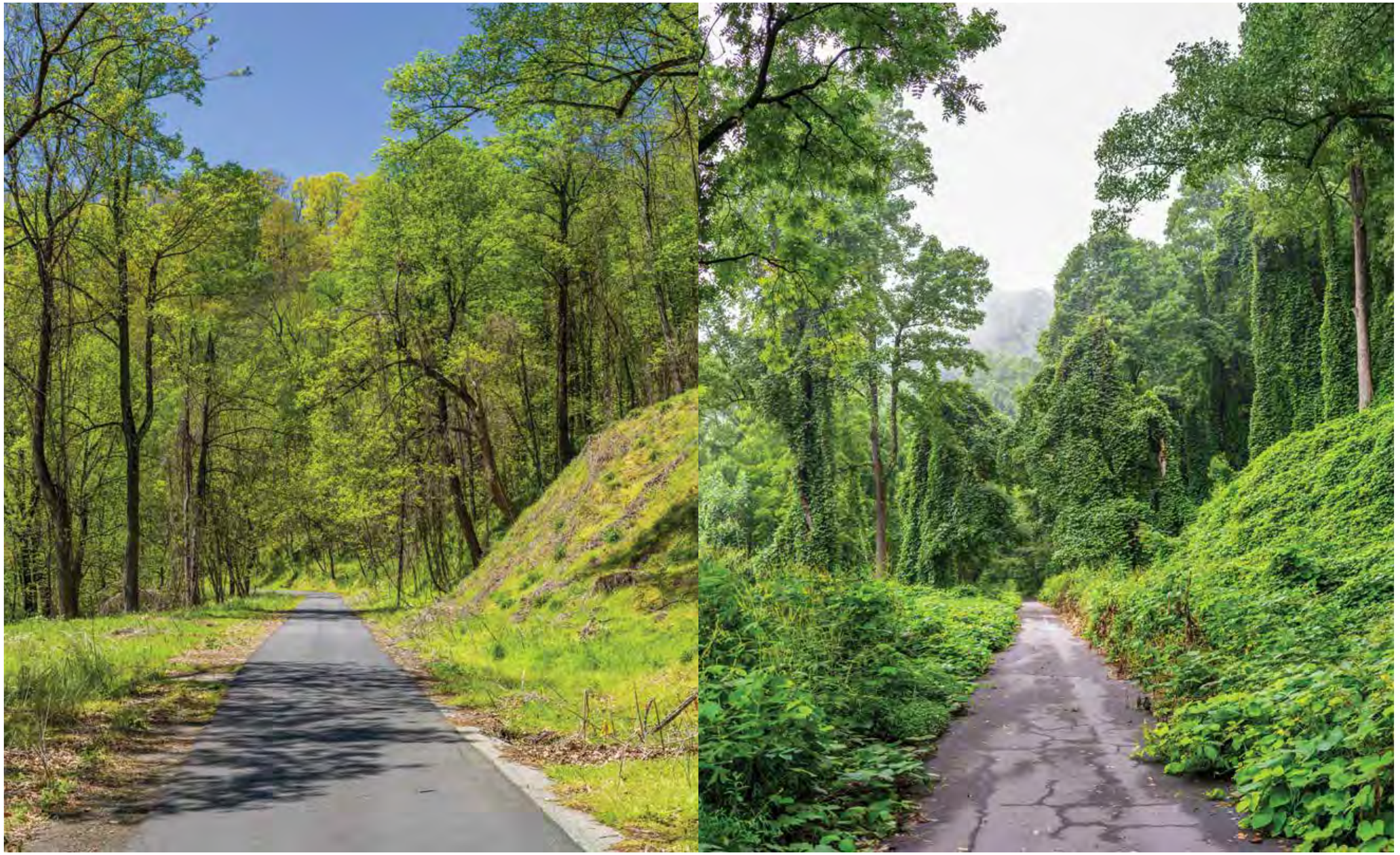
If a plant was designed to inhabit the disturbed edges of urbanisation, it would likely resemble *Pueraria montana*, commonly called kudzu.[1] Its desired attributes would focus on rapid-growth potential to cover eroded soil; nitrogen fixation to self-fertilise and amend the degraded soil; and the ability to tolerate extreme temperatures due to the urban heat-island effect. This vine fits that profile precisely, along with its additional adaptations, which are useful in the Anthropocene. Kudzu functionally benefits from the ever-increasing atmospheric carbon levels, helping it maximise its leaf production and starch accumulation in its root tubers.[2] Ecologically, it prefers linear edge habitats where it can propagate through asexual cloning in the full sun along linear infrastructural corridors that emanate from urbanised areas.

This suite of productive habits originally helped kudzu thrive in its native range as an East-Asian legume, which can be found from central Japan to Queensland, Australia. In traditional cultures throughout this range, kudzu acted as an ethnobotanical multi-tool by providing food, fibre and medicine. In fact, the nineteenth-century writer Ōkura Nagatsune cleverly labeled kudzu ‘a useful thing … in useless places’ due to its ability to grow in steep, poor soils.[3]

As naturalists have known since Alexander von Humboldt’s global journeys, a set of related climate and ecological conditions will support a comparable set of plant species.[4] Southeastern US has remarkably parallel conditions to kudzu’s native range, and a vast and growing network of disturbed lands to colonise. The eroded and stripped lands created fertile conditions for a botanical saviour. After an evangelical-level farming promotion as animal fodder and a parallel federal government program that distributed kudzu as an environmental fix for erosion in the mid-twentieth century, the vine developed a naturalised population along roadsides, railroad cuts, waste dumps, embankments cleared for development and utility corridors.

Despite the history of environmental usefulness, kudzu is now cast as an ethnobotanical monster. Nativist

Point Lookout Greenway in western North Carolina, US, was previously eroded, due to landslides caused by the cut-and-fill of road building in the 1920s. Thanks to the extensive planting of kudzu along the roadside edges, it is now a thriving greenway.
Left: Spring.
Right: Summer.
Credit: Casey Lance Brown



arguments, exaggerated stats and media hype obscure the niche kudzu ultimately occupies. Kudzu has been environmentally othered – despised for occupying the exact ditches it was originally intended to remediate.[5] Kudzu could be more accurately categorised as an ethnobotanical nomad that happens to be well-adapted for these disturbed edges, rather than a monstrous invasive with its own maniacal agency. It withstands winters by storing all its energy in root tubers underground and then sending forth new, fast-growing vines that crawl, reach and twine their way to the highest points of sunlight exposure. These phototropic behaviours bring forth invasive myths and overestimated coverages, as kudzu will not enter shady forests. There are effective maintenance methods (including harvesting it for botanical products), but all require diligence and repetitive application that do not easily fit into our annual maintenance regimes.

To paraphrase Bruno Latour, we must love our novel techno-environmental creations and responsibly manage our mutual entanglement.[6] Kudzu has co-opted the infrastructural edges and altered climate of the Anthropocene as its prime habitat. We are now co-extensive with kudzu in its most monstrous form. Much like Godzilla, the story of Kudzilla acts as a metaphoric vessel, an anthropological narrative symbolising our technological path. After abandonment and climate change have rendered the unintended consequences of botanical colonisation mute, Kudzilla will fade and kudzu will re-emerge as a nomadic remnant with nitrogen-fixing roots and tendrils reaching for an open patch.

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