



CASE STUDY //

THE WAR ON WATTLE: THE CASE OF WARD 21 IN MVENYANE, EASTERN CAPE PROVINCE, SOUTH AFRICA

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CONSERVATION
SOUTH AFRICA
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INTRODUCTION

Wattle trees (*Acacia mearnsii* and *Acacia dealbata*) have dark bark, feathery leaves and in spring, fluffy yellow flowers that turn into pea-like pods [1] [2]. In Australia, where wattle trees originate from, they represent national unity [3]. They are evergreen trees that can withstand Australia's harsh climate of frequent dry periods and strong winds. In other countries, including South Africa, wattle trees are an alien invasive plant that do not occur naturally because it was introduced by people [4] (see box 1). **If left unchecked alien invasive plants cause great harm to the environment, people and their livelihoods.**

Box 1: How wattle invaded South Africa

Wattle trees were brought to South Africa as a fast growing, drought tolerant alternate for shade trees, timber and firewood in the 1800s. When people discovered that the bark could be used in leather tanning, large scale plantations were grown in the KwaZulu Natal Province. Seeds were dispersed from the plantations through dispersal agents like birds, mice and people. They quickly spread into unwanted places like rivers, roadsides and degraded grasslands. Each adult wattle tree produces up to **50 000 seeds per year**, and they can remain **viable for up to 80 years**. They also grow new trees from their roots, especially when stressed by factors such as droughts or damage caused by chopping them down [1].

WATTLE TREE IMPACT

Wattle trees thrive in degraded ecosystems where they outcompete natural vegetation, change animal habitats and deplete soil nutrients [5]. Despite being drought tolerant, they consume large volumes of groundwater - **up to three times more** than natural grasslands - and prevent groundwater from recharging during rainy seasons. Wattle trees can grow **up to 4.5m per year**, and their roots can reach depths of **4.8m** [6].

We must control their spread so that rivers and wetlands can retain water for longer during periods of drought and buffer the effects of floods. Rangelands that are well managed and free of alien invasive plants are better able to provide fodder for livestock during extended dry periods. Nearly **60% more** fodder would become available by removing alien invasive plants [7].

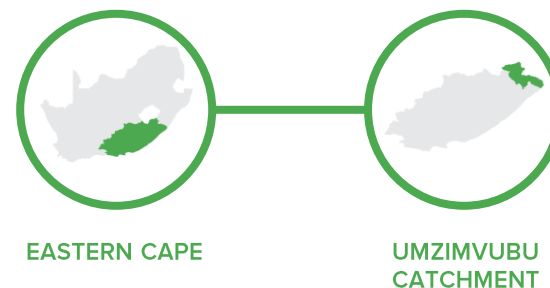
Focus Area: Ward 21, Mvenyane, Eastern Cape



¹ What is a ward? Each metropolitan and local municipality is broken down into wards for voting purposes by the Municipal Demarcation Board.

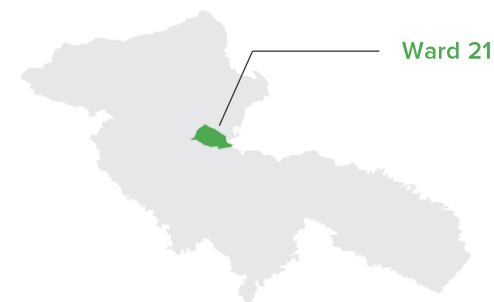
Forested hills can be seen from villages in Ward 21¹ in Mvenyane in the Umzimvubu River Catchment, Eastern Cape Province, South Africa. It may seem beautiful, but when you look closely, there is a war raging between wattle trees and the naturally occurring grasslands as well as patches of indigenous forest for space and resources.

Wattle was identified by local communities as threatening all aspects of their traditional livelihoods – which depend on the availability of fodder from grasslands, water from natural springs and a range of non-timber forest products for building, farming and cultural practices. Livestock-owning households are particularly vulnerable where wattle trees have invaded their grazing lands, reducing natural fodder for livestock and access to natural water.



EASTERN CAPE

UMZIMVUBU CATCHMENT



WATTLE TREE IMPACT IN MVENYANE / Wattle trees spread quickly, forming dense patches of forest across the fast-receding natural grasslands that make up the communal rangelands in Mvenyane. They leave no space for livestock to graze or for naturally occurring plants to grow. Livestock are easily lost in the wattle forests that are home to bushpigs, caracals and jackals, all of which can injure or kill cattle and sheep.

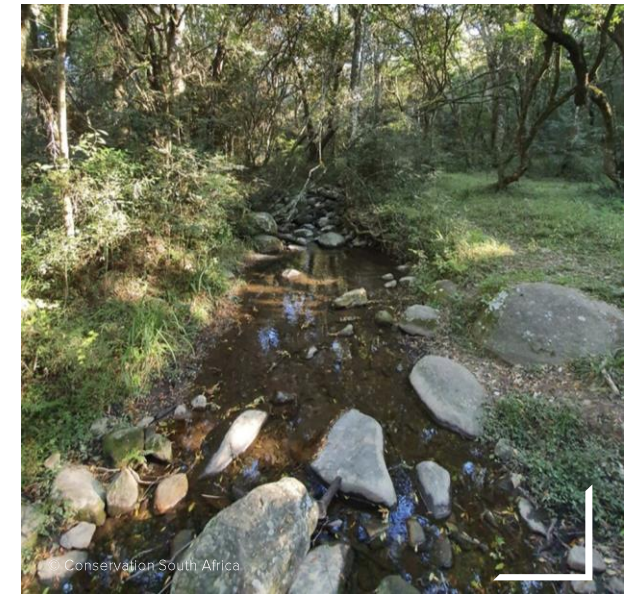
Wattle trees have soaked up the once abundant water from springs, leaving Mvenyane dry and easily eroded. This means that even in spaces where wattle is not taking over, grasses do not grow well and are not able to sustain livestock. There are few remaining indigenous fruit trees which no longer provide sustenance to the villages.

To make matters worse, the climate is changing. It is getting warmer and raining less frequently. This means that there will be even less water available and fewer grasses will grow in the rangelands, reducing available fodder for livestock. This is also interspersed with heavy rainfall events which cause flooding and erosion, bringing new challenges if natural vegetation and wetlands are not able to retain water and prevent erosion [8].

Worst of all, the wattle forests have chased people from their homes. As springs dry up and grazing lands disappear, families have been forced to abandon longstanding homesteads to move into lower-lying areas in search of grazing and water. Many of these homesteads have disappeared under wattle and grave sites are no longer accessible.

BEFORE WATTLE TREES INVADED

It was not always like this. Kenny and his brother, Lucas, who were both raised in Mvenyane, spent their youth looking after the family cattle. They recall how easy it was to track cattle and sheep as they were easily spotted up in the hills. As children, they ate the abundant variety of fruit offered by indigenous trees, as well as 'sweet mouth' tubers they dug out of the soil. There used to be many bees in the indigenous trees that produced honey for the community to eat. Kenny and Lucas say that going to bed hungry was not something that they knew. In the fruit trees sat cuckoos, starlings, and other birds that Kenny cannot begin to name in English. They also remember that there used to be water everywhere, including a waterfall in the hills.



THE WAR ON WATTLE

THE PROJECT / There was excitement buzzing through Ward 21 as people from each village² came together to clear wattle. From October 2021 to April 2022, Conservation South Africa³ and their field partner LEAD Associates, with funding from the South African National Biodiversity Institute as part of the Presidential Youth Employment Intervention,⁴ recruited 1 person from each of the 770 households in Ward 21 to conduct clearing.

The project's mission was to unite the community and respond to climate change impacts. The community selected wattle clearing as the most appropriate climate response - creating jobs during the COVID-19 economic crisis, providing unemployed women and youth with skills and directly supporting the communities' access to freshwater and food security through restoring grazing lands and springs. The goal was to create one wattle-free ward to demonstrate that a future without wattle is possible.

The project's success is a direct result of the support and commitment it received from the community, during and after the project. Mvenyane had existing leadership structures in place to mobilise the community for projects such as this one. The project drew from these structures to form a Project Steering Committee.

The Project Steering Committee included representatives from the Municipality, churches and Traditional Authorities. The Project Steering Committee was approached to help identify areas to clear, as well as the most vulnerable households and people to recruit. This was followed by interviews and data collection to ensure a transparent and fair selection process. Consultation with the Project Steering Committee showed that the most vulnerable were those who had never worked before, regardless of age.

A total of 770 people⁵ were recruited and trained on how to clear wattle safely and provided with tools and safety gear. Bank accounts were opened for 500 people who did not already have one, to facilitate the payment of their salaries. The bank reported that this was the highest number of new bank accounts created in such a remote area at one time. There were also 30 people who did not have identity books at the start of the project and means were arranged with the Department of Home Affairs to issue them with identity books.

Recruits were split into 70 teams comprising 10 general workers and 1 supervisor per team. Wattle was cleared using knives and chainsaws mostly, as chemical methods were harmful to people. After wattle was cleared, dry wattle wood was sold to artisan green charcoal-producing enterprises to reduce fire risk and generate money for follow-up clearing.

KEY PROJECT IMPACT



2 310.11 ha cleared including **1 821.33** ha of initial clearing and **488.78** ha of follow-up clearing



770 people employed (**37%** women and **53%** youth)



770 households generated an income from wattle clearing



1 Fire Management Initiative established to manage fire risks of dry wattle wood



735 people trained on restoring nature



926 people trained on the basic control of alien invasive plants



500 people opened first-time bank accounts.



770 community members met with local health teams to undergo medicals and explore key health issues affecting the community

² The project was conducted in 10 villages, namely Ntlola, Mdeni, Gwadane, Mabheleni, Nkawulweni, Msukeni, Magxeni, Upper Mvenyane, Rasheni and Sityiweni.

³ To enable young adults to become economically productive and contribute towards restoring nature, Conservation South Africa developed a Jobs for Nature Programme. It helps young adults and women to gain critical skills for future employment and to stimulate local economies.

⁴ [Presidential Youth Employment Intervention](#) aims to create jobs for youth (aged 15 – 34) through partnerships between government, civil society, academia and private sector.

⁵ Of these 758 people stayed in their jobs until the end of the project. Some recruits resigned, but with the funds earned they resigned to further their studies.

THE IMPACT OF THE PROJECT / Boxes 2 - 5 present the impact of the project on employment, household income, safety, food security, community mobilization and improved response to flooding.

Box 2: Impact of the project for job creation and community mobilisation, in the words of Sonwabile Mngenela, the Mayor of Matatiele Local Municipality.

“I travelled to Mvenyane one morning during COVID-19 as part of my Mayoral duties. I grew up in a village nearby, so I was shocked to see so many people carrying their lunch boxes and walking quickly in small groups so early in the morning. I spent time living in Johannesburg and the scene reminded me of people rushing to catch the train to go to work. I asked my team, “where are all these people going? There are no jobs here.” They told me about the project, and I was amazed at how much excitement and energy it was creating across the entire ward in such a difficult time.”

Box 3: Impact of the project on households, in the words of Aphiwe, one of the female recruits.

Most recruits indicated that the salary they received was life-changing for them and their households. Aphiwe says, “There is food on the table and for the first time, new school uniforms for the start of a new school year. Many rural households have no role model of a working parent, and this can stretch across generations. My son is learning from me.” With the money she earns from selling wattle, she would like to start a small business to create a sustainable future for her household.”

Box 4: People are safer now that the wattle has been cleared.

During the project, the crime rate was very low as people were working, had an income and everyone was busy. Now that the wattle is clear, community members also feel safer as there are also less places for criminals to hide [9].

Box 5: The community was able to respond to a flooding event.

Extensive flooding occurred during the rainy season while the project was ongoing. It demonstrated that the clearing reduced the risk of landslides and the impacts of flooding. In addition, the income each household earned enabled the community to respond to the flood themselves, without external support.



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THE WAR IS NOT OVER

Now that the wattle has been cleared in some areas, restoring rangelands through good grazing practices and replenishing water has become possible. With time, naturally occurring grasses can regrow for livestock grazing [7]. But the war is not over, wattle must remain cleared and work needs to begin in other areas.

The community has seen the benefits of clearing the wattle and is keeping it clear on a voluntary basis.

Volunteers are enlarging and improving grazing land, managing fire risk and increasing water supply. As a result, the community are in a position to launch a payment for ecosystem services programme. This means that they can be paid for maintaining and monitoring the services that nature provides for free, such as water supply. Water savings generated from the clearing can be registered and sold as credits to organisations who require water-saving credits. This money can be used to ensure that wattle remains cleared and allows the community to resell credits to generate money each year.



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CALL TO ACTION

1

Mobilise entire communities to engage in alien invasive plant clearing to motivate, equip and empower them to make longer term commitments to preventing the spread of alien invasive plants, for their benefit.

2

Work together with government, non-governmental organisations, the private sector and communities to build large scale clearing programmes that are sustainable and create long-term jobs.

3

Provide education and training to build skills in local communities to clear alien invasive plants and keep areas clear.

4

Implement a multi-initiative approach to clear alien invasive plants, restore rangelands and manage water. This unlocks opportunities for communities that prevent grassland degradation and control the spread of alien invasive plants.

5

Focus on the most vulnerable households, who are identified with local leadership, to make the biggest impact and ensure the continuation of the work even after a project ends.

6

Develop innovative finance mechanisms such as the payment for ecosystem services to ensure finance flows into the continuous conservation, management and sustainable use of nature.



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