



NEWSLETTER



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RURAL COMMUNITIES NO LONGER ON THEIR OWN:

Closing the Gap between Formal Fire Governance and the People Who Need It Most

When Meat Naturally Africa quietly became a member of the Vryheid Fire Protection Association (FPA) in May 2026, it marked a significant beginning for the 15 rural communities scattered across the communal rangelands surrounding Vryheid in KwaZulu-Natal. A bridge opened between the formal fire governance structures of South Africa and the millions of smallholder farmers and community members who have, for too long, faced the devastation caused by veld fires largely on their own.

"We only joined this month," says Guy Deacon, Technical Director and co-founder of Meat Naturally Africa (MNA), a farmer-owned social enterprise that works with rural communities across Southern Africa on regenerative grazing and land conservation. "But the intention is clear – once you've got a seat at the table, you can start slowly introducing the communities to the FPA and build much-needed relationships."

Why the Vryheid FPA and why now?

The Vryheid FPA is dedicated to preventing and managing veld and forest fires. Like other FPAs across the country, it operates under the National Veld and Forest Fire Act and coordinates with the KwaZulu-Natal Fire Protection Association (KZNFFPA), pooling resources, expertise and early warning systems

Membership is based on hectares, but even the most basic tier can be transformative for smallholder communal farmers because it provides daily fire risk information. "The direct benefit we're getting from the Vryheid FPA is daily Fire Danger Index (FDI) forecasts," Deacon explains.

The Fire Danger Index combines temperature, wind speed, humidity and other climatic factors to indicate how likely a fire is to start and how severe it could become on a given day. With this information, community members can decide whether to avoid lighting cooking fires on high-risk days, whether it is safe to burn firebreaks, and whether children should be kept away from dry grass. It shifts fire management from reactive response to proactive daily practice.

Building bridges in communal land

MNA has been building its fire management strategy since launching its community-based programme in 2021. It now works with 180 communities and associations restoring 580 000 hectares of communal rangelands in South Africa, with fire management woven through nearly all of that work.

Ironically, improving land condition can increase fire risk in the short term. As degraded rangelands recover under regenerative grazing, grass biomass rises, creating more fuel for fire. "When communities started improving their rangelands, we actually saw higher fire risk because they had more fuel loads (combustible material in a specific area)," Deacon notes. "So we brought in firebreaks and other measures to help manage that."

Vryheid FPA membership is the latest step in MNA strategy to integrate communities into formal fire governance. MNA Senior Fire & Land Associate, Bongumusa Buthelezi, played a key role in facilitating the organisation's membership. His efforts have helped establish stronger links between rural communities, livestock associations and formal fire management structures across the landscape.

In Ngcobo, in the Eastern Cape, MNA has also helped communities create new FPAs through traditional authorities. This was enabled by a recent amendment to the National Veld and Forest Fire Act, which for the first time recognises traditional authorities as entities that can form and run FPAs. "Communal and traditional areas have long been a grey area in fire management, so this recognition matters," Deacon notes.

More than firebreaks: a whole-community approach

A core principle of MNA is that fire is not just a farmer's problem. "Over ninety-five percent of fires are ignited by humans," Deacon says. "Many start in villages. If you focus only on farmers building

firebreaks to protect winter grazing, you miss where ignitions begin. It's everybody's problem."



This means MNA fire management work extends beyond the farmers formally in its associations. It runs awareness campaigns in schools, engages traditional healers, and involves traditional authorities in planning. "We teach communities to assess their fire risks, develop management plans and take practical steps such as clearing defensible space around homesteads, reducing fuel loads and making homes more fire-resistant," Deacon explains. "These are things they can do themselves."

Steven Hibbert, the Vryheid FPA's fire protection officer, echoes that view: "Most fires in our area start in communities. Education is how we will reduce the risk. We look forward to building on the progress Meat Naturally Africa has already made."

Five years on, MNA results are tangible: significant reduction in infrastructure, animal and human losses. Deacon says. "Communities now have the tools, response systems and plans to fight fires. That's a profound shift."

Women at the firebreak

The fire programme has also opened space for a more inclusive approach to land management, bringing women into fire governance.

Moses Kibi, MNA Fire Management and Soil Conservation Coordinator, recognised that fire, like livestock management, had long been seen as men's work. "We identified associations where we wanted women's buy-in," he explains. "Fire seemed to be handled only by men, but we wanted women to be part of the solution because it is everyone's responsibility."

Nearly half of participants in Meat Naturally Africa's Fleece Naturally (FN) initiative are women. *Women in Wool and Wildfire* is a pilot for FN's women small-stock farmers. Many community wildfires have started from cooking stoves or children playing with fire, making women's role in fire committees essential. Incentives are offered to women small-stock owners who commit to training, lead wildfire prevention awareness classes, and meet Responsible Wool Standards requirements.

This innovation could increase women's participation in higher-value wool production and boost livestock sales by reducing uncontrolled wildfires. "There are women in those areas who are now actively

burning firebreaks," Kibi says. "It is a small but meaningful step towards a more gender-equitable model of fire governance, one where the full fabric

of a community, not just its male farmers, is involved in protecting the landscape."



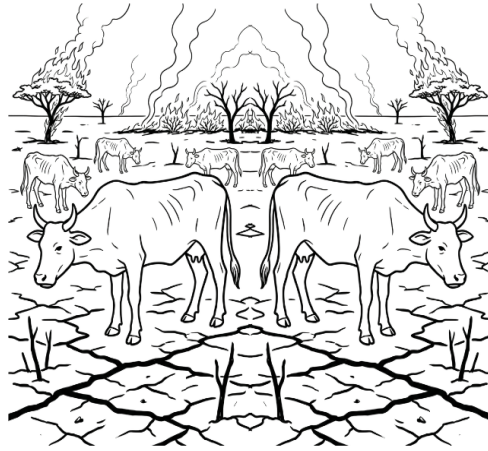
Looking forward

Over the next year, MNA will introduce the 15 communities it supports in the area to the FPA, build relationships and demonstrate the value of formal membership. The goal is for those communities to eventually hold membership of their own.

The approach reflects the patient, community-centred philosophy that has shaped Meat Naturally Africa since its founding: lasting change in grazing or fire management comes not from top-down instruction but from building trust, sharing knowledge and giving communities the tools to act for themselves.

"We can't remove the risk," Deacon says. "But we can reduce it. And that starts with making sure that no community faces the next fire season alone."

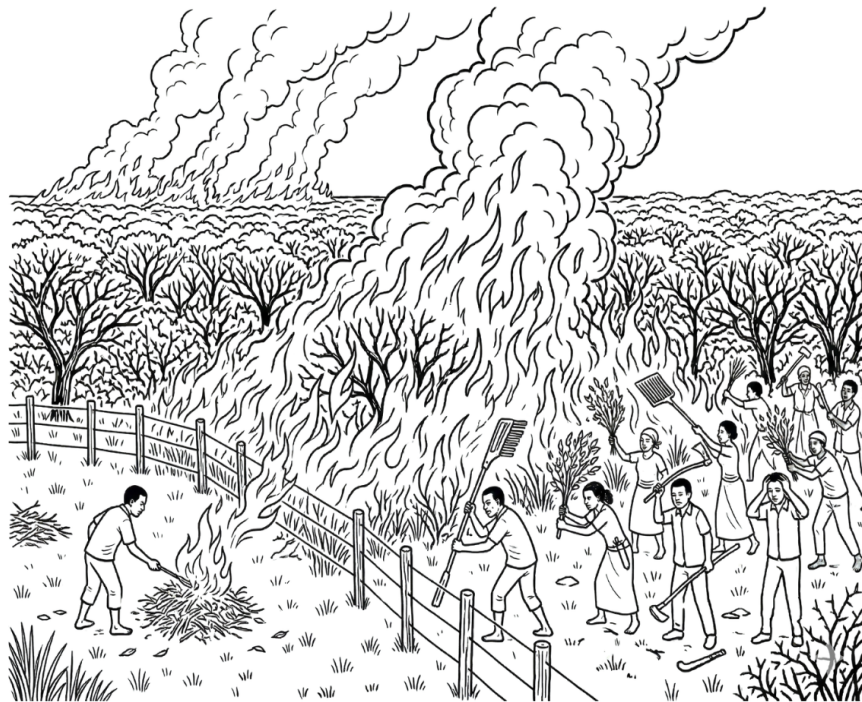
WILD FIRES ARE EVERYONE'S PROBLEM



Unplanned fires burn grazing and the animals starve.

Thick bushes make fires burn hotter.

Fences do not stop fires.





Protecting Nature, Inspiring Change:

Goboti Young Kids Step Up in Preventing Wildfires

Rangeland restoration in Goboti Rangeland Association has not been dependent solely on farmers. Young kids in the community have also emerged as active environmental protectors, showing a strong commitment to protecting and understanding their natural environment.

During the last fire season, the Goboti Young Stars took initiative to assist in protecting their community rangelands. They participated in the creation of fire belts to protect community rangelands from destructive wildfires. Their dedication played a significant role in ensuring that most community rangelands survived the fire season, highlighting the power of youth participation in environmental conservation.

Beyond protecting grazing lands, these efforts contributed meaningfully to carbon sequestration, improved ecosystems, and promoted a culture of collective responsibility towards sustainable rangeland management.

In recognition of their outstanding environmental contribution, Meat Naturally Africa rewarded the Goboti Young stars with a soccer ball as a token of appreciation. This gesture aimed to celebrate their dedication, encourage continued participation and motivate even greater involvement in safeguarding the Goboti's rangelands in the season ahead.



COLLABORATION BETWEEN LOCAL FIELD OFFICERS AND ASSOCIATIONS:

A Case Study of Sondelani Hlankomo Farmers' Association Fire Awareness Event

The Sondelani Hlankomo Rangeland Association is one of seventeen transitioned associations in the Tsitsa catchment and part of the 2021 cohort. In collaboration with Lima, the association has been implementing Meat Naturally's business development model. Since transitioning, it has managed its own carbon revenue to sustain rangeland activities, with support from its Local Field Officer (LFO), Miss Noluvo Masangweni.

Miss Masangweni supports the Makhunga, Lower Tsitsana, and Sondelani Hlankomo associations. Her role became especially important as Meat Naturally's extension and technical teams stepped back, transferring full operational and business control to the association. LFOs continue to support transitioned associations by monitoring rangeland activities and maintaining key extension functions.

Carbon Revenue and Strategic Budgeting

In the 2026/27 fiscal year, Sondelani Hlankomo received R405,737 in carbon revenue under the world's first carbon programme to issue community-led carbon credits under the Climate, Community, and Biodiversity (CCB) label. To support this milestone, Meat Naturally's finance department ran a series of budgeting workshops. Miss Masangweni and the Lima extension team helped organise these sessions and supported the association in planning its budget.

At this critical stage of independence, the association had to prioritise core rangeland activities such as veterinary support, fire management, Eco Ranger payments, awareness days, training, and administrative costs. Once these essentials were budgeted for, it could allocate funds to community initiatives, equipment, infrastructure, and other priorities that support the long-term sustainability of the business.

The Fire Awareness Day Success

A highlight of this budgeting process was the planning of a fire awareness day on 23rd April this year. The event drew more than 250 attendees, including stakeholders from Elundini Municipality,

Afrivet, Lima, the Department of Agriculture, local traditional authorities, and Environmental Rural Solutions (ERS) farmers, alongside representative farmers from neighbouring Makhunga and Lower Tsitsana associations.

The association allocated R35,000 to the event, covering the purchase of a cow, a sheep, and a pig,



as well as groceries, grass cutting, posters, and transport. In the days leading up to the event, the veterinary public health unit inspected the meat and storage facilities and approved the event.

To build broad support for fire awareness, the association sent formal invitations to key stakeholders, including the Department of Agriculture, Elundini Municipality Fire Department, the Department of Social Development, PG Bison, the Department of Health, the Eastern Cape Rural Development Agency (ECRDA), and SANPARKS. With support from Lima and Meat Naturally, it also held a preparatory meeting in Maclear with the Department of Agriculture to formally invite them to the event.

Community Upliftment and Farmer Agency

This landmark event went beyond fire awareness. It also served as a platform for community upliftment, highlighted by the association's donation of school

shoes to 27 vulnerable children from the nine local villages under Hlankomo. A defining feature of the process was the farmers' strong sense of agency: they took ownership of the business, identified immediate community needs, and addressed operational challenges along the way.

Throughout the planning process, Miss Masangweni played a pivotal role in maintaining clear communication between the association, Lima, and Meat Naturally. During a key planning meeting attended by representatives from Meat Naturally, SANPARKS, and the Department of Agriculture, she guided the structuring of the event programme and prioritisation of stakeholder invitations while ensuring that final decisions remained with the farmers.

Strategic Partnerships and Local Dynamics

During the same collaborative meeting, essential biosecurity control measures were finalised. In response, the Department of Agriculture committed to supplying the necessary biosecurity equipment

for the event, and fulfilled that commitment on the day.

Another important, often unseen, aspect of the process was the complex community dynamics the LFO had to navigate while supporting the farmers. Miss Masangweni managed these sensitive local relationships with discretion, empathy, and cultural understanding, ensuring that all parties felt respected and included. While partners provided valuable support, the farmers themselves led the event and drove their own development.

Conclusion

The Sondelani Hlankomo Rangeland Association is an example of what meaningful collaboration between farmers and Local Field Officers can achieve. Through mutual trust, shared accountability, and a common vision for healthier rangelands and resilient rural livelihoods, the association has emerged not only as a functional business entity, but also as a model of community-led development.

Klein Jonas Networking at Hlankomo Farmers' Day

Members of the Klein Jonas Association recently had the opportunity to participate in the Hlankomo Farmers Day celebration, a valuable cross learning and networking opportunity.

Representing Klein Jonas, Tiisetso Tshabalala and Sehloho Makhoro were

excited to be part of the event. They gained valuable insights into the role that carbon revenue can play in supporting associations and creating real opportunities for sustainable development. The visit also highlighted the importance of long-term planning, good governance, and active participation by association members.

One of the most inspiring aspects of the day was witnessing the strong unity and collaboration among Hlankomo's leadership structures. Traditional leaders, elected representatives, and



association members worked together in a spirit of shared purpose. A meaningful exchange took place between the chairperson of the Hlankomo Association, Mr Dyantyi, and the two members of the Klein Jonas Association. Topics included managing difficult member dynamics, addressing the recurring threat of winter veldfires, and maintaining group momentum.

A key lesson that emerged from these conversations was the importance of keeping good records and taking proactive steps to address challenges before they become larger problems. Clear communication, and collective responsibility are essential ingredients for a successful association.

Upon returning home, Tiisetso and Sehloho shared their experiences and learnings with fellow Klein Jonas members. They spoke enthusiastically about the benefits of belonging to a united and active association and encouraged members to continue strengthening relationships within their own association.

We Act Together or We Lose Together - No One Wins Alone.

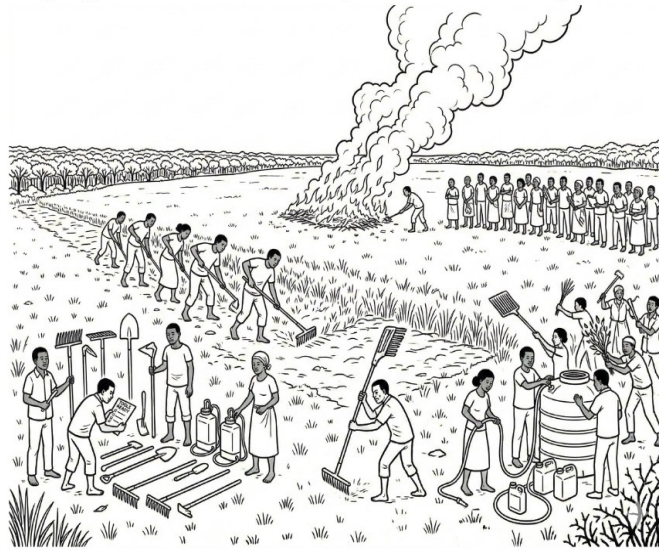
STEP 1: UNITY

When we stand together we can stop unplanned fires.



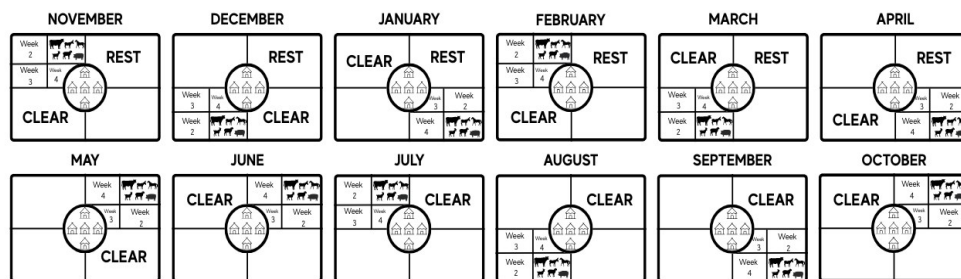
STEP 2: CHOOSE WHERE, WHEN & HOW TO BURN

Planning together makes fire a helpful tool, not a dangerous enemy.



STEP 3: GRAZING PLANS

Clearing bush and managing grazing stops small fires from becoming disasters.



GRASS Field Experiments with University of California, Santa Barbara



Over the past year researchers at the University of California, Santa Barbara (UCSB) have been working together with Meat Naturally to identify ways to increase participation in Meat Naturally's rangeland management and rotational grazing programs. Two areas of collaboration have been identified, 1) compliance monitoring and 2) research into effective GRASS payment strategies. Over the course of the next year we propose to test the two interventions.

Compliance monitoring

Meat Naturally works with farmers' associations to develop and implement rotational grazing plans. These seasonal grazing plans detail (a) the location of the communities' grazing sub-divisions; (b) when cattle should be rotated through these sub-divisions; and (c) which sub-divisions should be rested. However, there is relatively little information about the extent to which actual grazing behavior matches these plans.

To fill this gap and unlock further improvements in rangeland management, we would like to develop a cost effective monitoring system that tracks the movement of cattle in Meat Naturally communities. In particular, we'd like a monitoring system that can identify: Whether cattle are grazing inside of the intended grazing-subdivisions; whether cattle are entering designated rest areas; the time of day when cattle are moving outside of their intended subdivisions or are entering rest areas.

Utilizing [Grazertrack](#) technology, which includes livestock tracking collars and ear tags, we will pilot compliance monitoring on a select set of 3-5 communities. These communities will be chosen based on proximity to the framed field experiment communities, cell coverage and length of time in Meat Naturally programs.

This feasibility stage will help us determine if the Grazertrack technology, which transmits data via cellular network, will work in our sample communities. If the tracking technology performs well, we will work towards a more robust rollout of the technology in 35-50 communities. While the initial rollout will be used for compliance monitoring, future applications of this system could include information systems that support farmers by alerting them to potential cattle theft or deviations from the intended grazing plan.

GRASS payment strategies

Designing effective payment schemes is challenging because ecosystem services like carbon sequestration are produced under substantial uncertainty. Weather variability, droughts, fires, and limits in measurement and verification systems all affect outcomes in ways that farmers cannot fully control.

The study of three different payment strategies based on various input and output levels will involve participation of some associations' memberships. It is not intended to deliver definitive policy prescriptions. Instead, it is designed as a learning tool that will help Meat Naturally better understand the trade-offs inherent in GRASS contract design and support more informed discussions about how to balance predictability, incentives, and trust in real-world programs.

MN Kruger Meats and Sibuyi Abattoir Partnership Strengthens and Brings New Value to the Kruger Buffer Zone

MN Kruger Meats is proud to announce a new partnership with Sibuyi Abattoir, a collaboration that is helping transform livestock marketing opportunities for communal farmers living in the buffer zone of the Kruger National Park.

Since February 2024, MN Kruger Meats has operated a pioneering mobile abattoir service that brings formal meat processing directly into rural communities. Through a new partnership with Sibuyi Abattoir, we are building an accessible, efficient, and farmer-friendly livestock value chain while supporting the broader goals of sustainable rangeland management and rural economic development.



Sarah Frazee and Sibuyi Nhlamulo meet with farmers and Conservation South Africa stewardship team in Englington to introduce the new partnership.

For many communal livestock producers, distance to formal abattoirs, transport costs, and limited market access have historically reduced the value they receive for their animals. The mobile abattoir model addresses these challenges by taking processing services closer to farmers, reducing stress on animals, lowering logistical costs, and ensuring that meat is processed according to the required food safety standards.

The partnership combines the strengths of both organisations. MN Kruger Meats works directly with farmer associations across the buffer zone, supporting improved livestock production, animal health management, and market coordination. Sibuyi Abattoir contributes its expertise in meat processing, compliance, and market-ready product handling, ensuring that animals are processed to the highest standards.

Beyond improving market access, the partnership also reinforces the link between sustainable livestock production and improved livelihoods. Farmers participating in regenerative grazing and rangeland stewardship programmes with MN Partner in the Kruger area, Conservation South Africa, are increasingly able to access formal markets that recognise the value of responsibly produced livestock. This creates stronger incentives for good land management practices that benefit both communities and biodiversity. In May, the collaboration also donated 120 kilograms of meat to Nourish for their school meals, further strengthening the links between local livestock production and local development.

As MN Kruger Meats and Sibuyi Abattoir launch their collaboration, they look forward to building an inclusive livestock economy that delivers value to farmers, supports rural jobs, and contributes to the long-term sustainability of the landscapes and communities surrounding the Kruger National Park.

Help Provide Nutrition Security

To combat malnutrition in South Africa, you can partner with Meat Naturally. For just R1000, you can supplement 150 children's meals with high-quality, sustainably sourced beef. Your donation to Meat Naturally Kruger supports local farmers who practice regenerative agriculture, keeps money circulating within the community, and helps fight food insecurity.

Donate by emailing Meat Naturally's Ayanda Mhlonyane at ayanda.mhlonyane@meatnaturallyafrica.com or sending a Whatsapp/calling +27 078 9932596.



SIBUYI INVEST
ABATTOIR
fresh meat always



A new partnership between MN Kruger Meats and Sibuyi Abattoir donated 120 kilograms of meat to Nourish for their school meals.

Wool Season 2025: A Strong Harvest for Our Farming Communities

The 2025 shearing season has been one to celebrate for the farmer associations participating in the Fleece Naturally Africa programme. Favourable market conditions, combined with smart operational management and pricing strategy, saw FNA secure strong returns on behalf of its farming partners across the Eastern Cape. The quality of wool presented this season—a reflection of ongoing improvements in animal management, rangeland stewardship, and shearing practices—positioned the clip competitively at auction. The result is a meaningful profit share distributed across nine qualifying associations holding active Rangeland Stewardship Agreements. Crucially, the share is structured to be proportional: each association's portion reflects both the quantity of wool it contributed and its quality. This means an association is rewarded directly for what it brings to the collective clip, and the gains from better managed, cleaner, finer wool flow straight back to the community that produced it.

These returns come at a moment of renewed global interest in natural, traceable, and ethically produced fibres. As consumers and brands increasingly favour wool for its sustainability over synthetic alternatives, South Africa is being recognised for the quality of its clip and its role in the global supply chain. But for that recognition to mean something on the ground, communal farmers must be part of the story—and the traditional barriers that have historically excluded them from premium markets and fair returns must be dismantled. Fleece Naturally exists precisely to ensure the communities producing this wool sit at the centre of a growing market, not its edges.

This year's profit share is more than a financial return—it is a direct reward for the commitment these communities have shown to sustainable land and livestock management. Funds are held securely through Meat Naturally NPC and directed towards investments that association members collectively decide on. Past seasons have seen funds used for herder salaries, veterinary medicines, fire management equipment, rangeland rehabilitation, farmer training, and ram breeding improvements.

Step 3: Your association's profit share

Total profit shared: R38 300 | Allocated proportionally by wool value (before shearing fees)

Association	Wool Value (R)	Share (%)	Profit Share (R)
Makhoba	R97 527	20.94%	R8 019
Makhunga	R77 241	16.58%	R6 351
Njijini	R59 876	12.85%	R4 924
Nkosana	R59 130	12.69%	R4 862
Nkasela	R54 592	11.72%	R4 489
Colana	R42 977	9.23%	R3 534
Lungangeni	R33 111	7.11%	R2 723
Ntsimangweni	R29 520	6.34%	R2 427
Nkookweni	R11 809	2.54%	R971
TOTAL	R465 783	100%	R38 300

Whatever the choice, the decision belongs to the community — and that, perhaps more than anything, is what makes this model so powerful.

The Start of Something Lasting

While this season's return is worth celebrating in its own right, we see it as a beginning rather than a milestone. The structures now in place — active stewardship agreements, a competitive collective clip, and a transparent profit share — are designed to compound year on year. As associations strengthen their husbandry and rangeland practices, the quality of the clip rises, returns grow, and the case for participation becomes clearer to neighbouring communities still weighing whether to join. Our hope is that this season's farmers become the model's most persuasive voices, and that each year's distribution lays the groundwork for the next.



What Makes This Model Different

Here the Fleece Naturally approach builds on something distinctive within the Meat Naturally NPC structure. Rather than paying out to individuals in isolation, the model channels returns to associations and asks members to decide together how those funds are used. That single choice—collective ownership of the proceeds and collective decision-making over their use—does something a per-household payment cannot. It rewards cooperation, strengthens local institutions, and gives every member a tangible stake in the group's shared success. The model doesn't just return money to communities; it builds the habit and the structures of working together.

Towards Owning the Means of Production

Looking ahead, one of the most exciting possibilities is what these profits could help build. A portion of a community's share could be used to kickstart independent, community-run shearing operations — with FNA providing the training, equipment guidance, and operational support to get them off the ground. Over time, the aim is for communities to own their shearing infrastructure outright, capturing more of the value of their clip rather than relying on external contractors. This is the long arc of the FNA vision: not simply better prices in a good year, but communities that own their means of production and control more of their own wool economy.

Recovery: The Foundation of Productive Grazing

Rangelands are amongst the world's most important natural landscapes. They provide several ecological services, including forage for livestock and wildlife, water capture, nutrient cycling, carbon sequestration, and support for biodiversity both above and below ground. Despite their significance, rangelands are highly susceptible to disturbance such as uncontrolled and repeated grazing and therefore require effective management and adequate resting periods to allow grasses and soils to recover.

Healthy veld depends not only on how animals graze, but also on how long plants are allowed to recover afterward. Failure to apply these principles can lead to veld deterioration and reduced ecosystem functioning.

Species composition is often an important indicator of rangeland health. This means that high species diversity does not always indicate healthy veld, rather, the dominance of desirable species can tell a meaningful ecological story. During veld monitoring activities in different grazing associations across northern KwaZulu-Natal, including Isibanisemfuyo, Mangeni, and Nsolweni, we have observed the importance of resting grazing lands firsthand.

The longer rangelands are rested, the more opportunity grasses have to restore their energy reserves, recover foliage, and strengthen root systems. This creates favourable conditions for productive and nutritious species such as *Themeda trianda* to thrive with reduced competition. Community members have also expressed enthusiasm about the visible improvements in rested grazing areas, particularly the increased availability of forage for livestock during the winter season.



Figure 1: Species composition in the rested areas of Nsolweni (A), Mangeni (B), and Isibanisemfuyo (C) grazing associations in KZN North, with *Themeda trianda* dominating the veld. (Photos: Z Sithole)



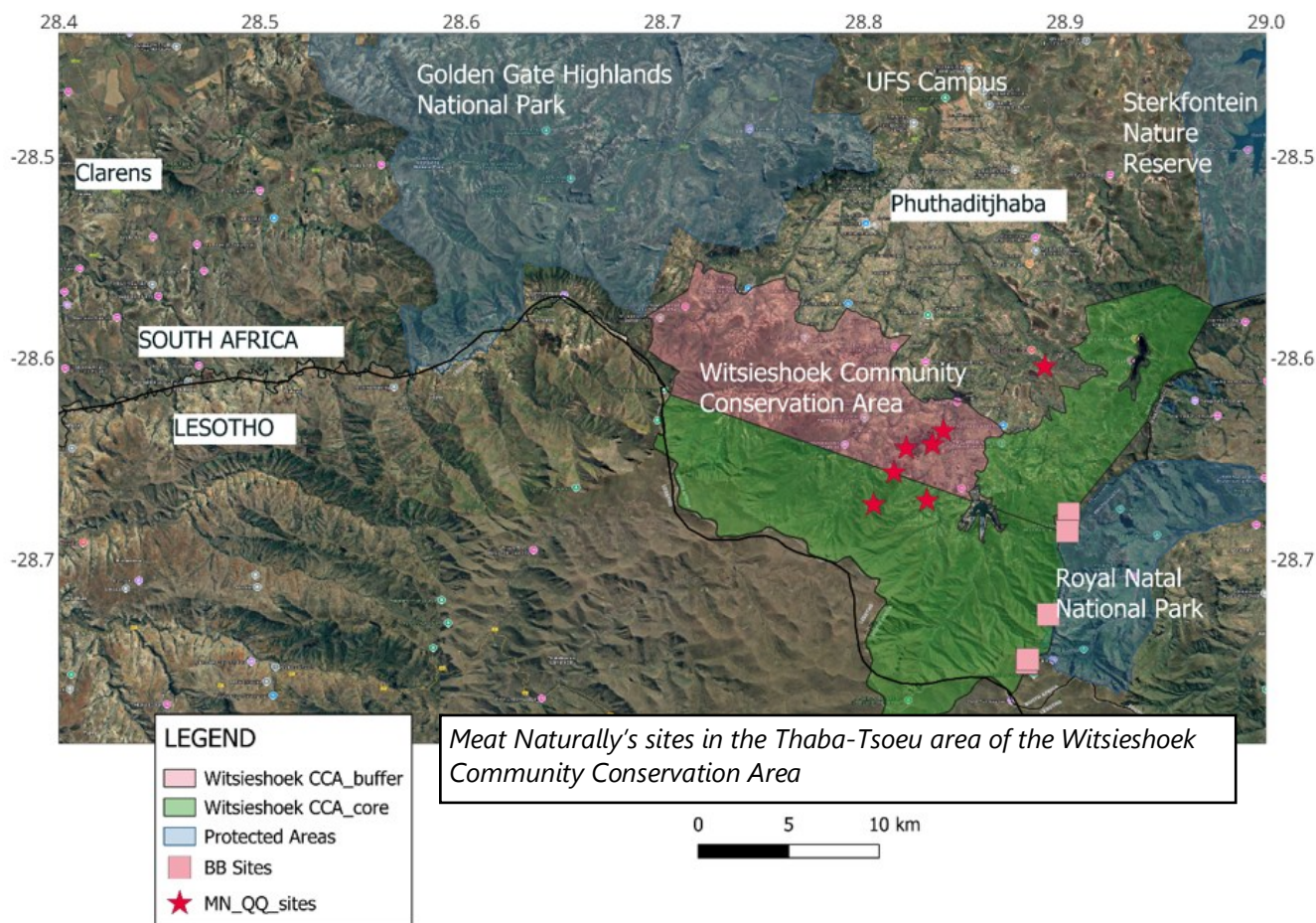
In addition, healthier and less disturbed rangelands support ecosystem functioning by providing habitat for ecologically important organisms such as insects and earthworms. These organisms contribute to nutrient cycling, soil aeration, decomposition, and overall soil health.

Effective rangeland management promotes increased litter cover, stronger root systems, improved water infiltration, healthier soils, and greater biological interactions within the ecosystem. In this way, regenerative and sustainable grazing practices support not only communal farmers and livestock production, but also the long-term ecological health and resilience of rangelands.

An insect-eye view of rangeland restoration in Qwaqwa's mountain pastures

The Witsieshoek Community Conservation Area (WCCA) of the Maloti-Drakensberg hosts a rich diversity of more than 1200 species of plants and animals, according to a [2025 study](#). The same study advocated an ecotourism- and community-centred restoration and rewilding approach to conserve this biodiverse but vulnerable area. In an exciting project to realise this exact goal, in partnership with Meat Naturally Africa (MNA), the Witsieshoek Lodge and the Qwaqwa Royal Houses, researchers and students at the University of the Free State (UFS), Agricultural Research Council (ARC) and Wits University are studying how grazing and land management affect rangeland health and biodiversity in the WCCA. The project at Molepe in the Thaba-Tsoeu community is supported by funding from the Hans Hoheisen Charitable Trust and the National Research Foundation through the joint SA-Norwegian "NatuRA" project.

Largely through the efforts of Mr Sechaba Motsumi, ecologist consultant of the Bakoena Royal House, MNA commenced working with the local community, training livestock owners and forming a Rangeland Management Association (RMA) about a year ago. They have also conducted veld assessments at sites that will be used by the researchers for insect sampling, enabling monitoring of pasture rotation over the next three years. Insects such as dung beetles, springtails, flower-visiting insects, and grasshoppers will be used as ecological indicators of veld condition across different grazing intensities. During March 2026, entomologists and students surveyed MNA's field sites and commenced preliminary field work close to Witsieshoek Lodge, at relatively ungrazed grassland sites which will provide a benchmark for assessing rangeland restoration for the project.



Over three years, the goal is to develop practical indicators that farmers and conservationists can use to monitor veld health and support more sustainable grazing practices. The project has ambitious goals, not only to restore over 800 ha of degraded rangelands and 400 ha of alpine habitat, and to train at least 30 local livestock owners as “eco-rangers”, but importantly, to provide ecological and socioeconomic data to scientifically demonstrate the success of MNA’s model for rangeland restoration, both in terms of ecological improvement and the socioeconomic improvement of livestock owners and herders. The project will involve researchers and students from multiple departments across the Natural Sciences and Agriculture, Humanities and Economic Management Sciences Faculties of the Qwaqwa campus of UFS.

The project is a wonderful example of industry-academic collaboration deeply rooted in meaningful and beneficial partnerships with local stakeholders and communities. With MNA’s “magic touch”, Witsieshoek CCA can provide a shining example and a model for sustainable, evidence-based conservation and climate-resilient pastoral livelihoods in other grassland mountain ecosystems in Africa and worldwide.



“Before and after”.

Far left (before): Rangeland Management Association Chairman, Mr Lebohang Senoane, indicates degraded grasslands to UFS researcher, Shilpa Parbhu.

Left (after): Rangelands at Thaba Tsoeu that have been rested for six months.

Right: a colourful locust was one of several insects identified at the Qwaqwa field site. Far right: Ball-rolling dung beetles like this one found in the car park of Witsieshoek are good indicators of a healthy rangeland.



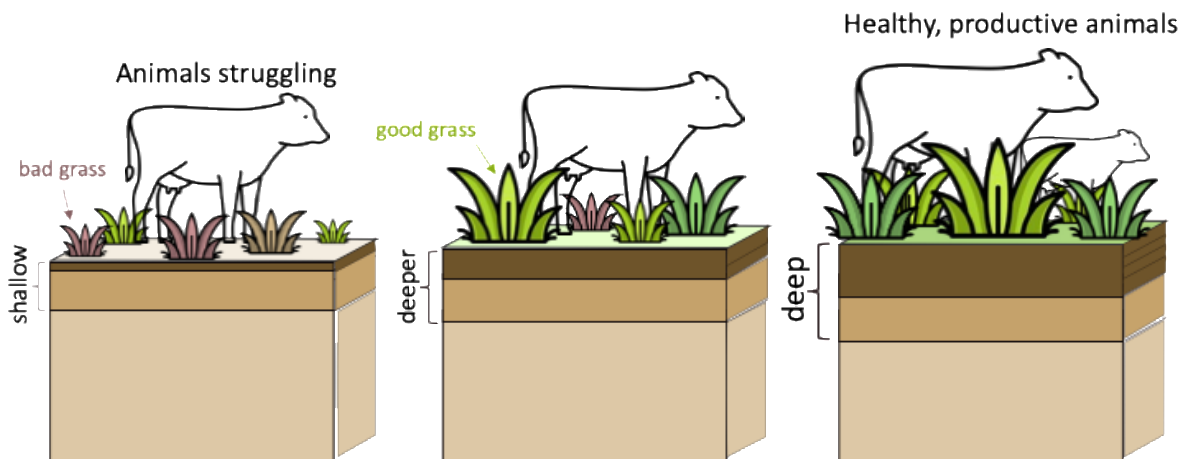
Carbon Series, Part 3:

Design principles for rangeland restoration

This is Part 3 in our newsletter series on rangeland carbon. We started by separating what is important in the carbon story from the complexity. We then covered how “carbon” is calculated and what can be done to increase carbon revenue. In this installment, we explore what goes into designing regenerative management plans as part of a carbon programme.

The Objectives

The place to start with any plan is to understand the objectives. The important objectives are not those of Meat Naturally, or carbon buyers, or the state. For a strategy to last, it needs to be relevant to the objectives of local land users and communities. To be relevant to a carbon programme, the strategy needs to be sustained for decades or for generations. Five-year implementation timelines will not work in a carbon programme. Near the top of the list for almost all farmers, regardless of the reason for owning livestock, is to have healthy, productive animals. This is dependent on diverse, healthy, and productive grass production, which is likewise dependent on deep, healthy, carbon-rich soil. Rangelands are amazing systems to work in because of the alignment between local land-user objectives and broader societal priorities. Conditions that maximize agricultural resilience are the same as those that support biodiversity, that buffer the impacts of extreme weather like floods and droughts, that sequester carbon from the atmosphere, and that reduce soil erosion. Whatever the current rangeland condition, there is generally an objective to move from the left to the right on the spectrum presented below.



The spectrum of rangeland condition and its impact on livestock health and production.

Seeking to Understand

For a rangeland stewardship plan to be effective, it needs to be sustainable. For restoration to be sustained, local land users must trust, have hope in, and own the strategies. The easiest way to undermine this is to impose an external ‘solution’ that requires ongoing external oversight or momentum to work. Seeking first to understand is not about technical solutions, but about understanding the story and history of the land. How is it used and by whom? What changes have taken place? What risks or concerns need to be considered? Are there areas to be avoided at certain times or activities that should

be prioritized? How was the land managed in the past, and what strategies were found to be effective or ineffective? Connecting with the story and history of the land allows for the stewarding of more than just the natural resources.

Putting it Together

The practicalities of rangeland stewardship go far beyond a single newsletter article. There is no one-size-fits-all intervention for every context. Certain principles, however, can be relied upon to guide planning and implementation.

Work with the system, not against it. Rangelands are dynamic and complex systems. Trying to control it will almost certainly backfire, so remaining adaptable and connected to its dynamics is critical. For example, if wildfires often come from a certain direction, whether because of the prevailing winds or the favourite area of children to play with matches, fire breaks can be implemented in strategic locations to provide responders a defensible space from which to limit their spread. If an unplanned fire burns a section of the rangeland at the end of winter, it would probably be better to adjust the spring grazing plan to account for this rather than proceeding with a planned burn elsewhere. If there are seasonal rivers or springs in the rangeland, the grazing plan should maximize the time spent in those areas at the right time of year.

Everything should get its turn. Management activities can vary widely, but there are common tools that serve known functions. High-density grazing concentrates disturbance and nutrient deposition while removing palatable biomass. Full-season resting enables the replenishment of below-ground resources and the vigour of grass root production. Short grazing return intervals in the wet season ensure the grass remains in its palatable growing phase and avoids senescence. Fire, under the right conditions, recycles unpalatable biomass, stimulates soil health, and creates habitat niches for greater biodiversity. These are all valuable tools, but they should be varied and rotated through the system. Rangelands need a dynamic cycle of disturbance, rest, and recovery. Too much of any of these tools, especially applied continuously or persistently over multiple years, will result in degradation.

Manage for what you want. By understanding the story, history, and ecological dynamics of the rangeland, it should be possible to construct a mental model of the dynamics that promote one state over another. There are certain conditions, for example, that enhance the competitive advantage of undesirable invasive species over the natural vegetation. Other conditions might favour stalky, woody, unpalatable grass species over nutritious and productive grazing species. Stewardship is about implementing management practices that will shift the balance of the system towards more favourable conditions.

Across all these principles, certain themes emerge. Listening and responding to the story of the land is critical. Rigid systems will not work. Local perspectives and priorities are more important to long-term success than anything that can be found in a scientific journal. Management tools are important and useful, but only when applied in the right context.

