

The good shepherd: remedying the fencing syndrome



C F Cupido & M Salomon



Our argument



In support of Vetter's position that

•the focus on 'correct' stocking rates, fencing, and rotational grazing to manage veld and improve productivity (481-482) is inappropriate because it ignores the ecological, social, and economic realities of livestock keeping in areas under communal land tenure (488-490).



We respond to Vetter's call



- To recognize the diversity of ecological and land use systems and multiple livelihoods
- To stop throwing technological solutions at complex problems
- To find innovative ways for sustainable rangeland management, including resting and NOT necessarily fenced grazing camps (519-521)



We will discuss



1. A historical perspective on the **narratives** on fencing and degradation & rotational grazing
2. Factors influencing the management of the rangeland commons
3. Why fencing is a problem
4. Herding as multi-purpose strategy
5. Issues for consideration

Drawing from research in the Northern Cape and the uKhahlamba Drakensberg KZN

Key moments in the historical development of fencing in SA



- Colonisation: 'trekboere' used transhumance similar to the indigenous people.
- **Fencing Act 1912**, required farmers to fence their properties,
- **1922** an amendment required farmers to make their fences **vermin proof**
- **Drought Investigation Commission** of 1923 indicated that the carrying capacity of veld could be increased by the subdivision of the veld into camps.
- **Vermin Extermination Commission** of 1924 – both commissions were convinced that lambing rates and survival, carrying capacity and wool yields would increase with jackal eradication and fencing

Historical development of fencing (Cont.)



- Bounties paid for vermin from as early as 1656 until 1957
- Control techniques used were hounds, traps, shooting and poisoning
- In 1960's there were 110 registered hunt clubs in Cape Province - subsidies from the Department of Nature Conservation
- **No method proven to be effective**
- Predation Management Forum on the forefront in fighting proposed N&S



The degradation & rotational grazing narrative

- The concern with degradation dates back to the period of the Dutch East Indian Company (Beinart, 1996)

1930s:

• Vegetation conservation

Illyd Pole
Evans



• Successional dynamics of forest and rangeland vegetation

Prof John
Phillips



Two influential scientists initiated a large body of research on rotational grazing and destocking to remedy degradation of rangelands under communal tenure (Scoones, 1996)

Degradation & rotational grazing (cont.)

- From 1970s: scientific evidence of the complex, disequilibrium and non-equilibrium dynamics of ecosystems and rangeland system

For example:

–O'Reagain & Turner (1992) challenged the effectiveness of rotational grazing as main rangeland management tool

–Briske & colleagues' (2008) review of 60 years of research experiments did not show that rotational grazing is superior over continuous grazing

What does this tell us about Knowledge-to-policy processes?

- Knowledge-to-policy processes are not necessarily neutral or essentially good. They involve **erratic and opportunistic processes between actors** (Jones 2009).
- Tensions occur between:
 - the objectives of scientific research and those of policy,
 - what comprises 'good science' and 'bad science' in the eyes of either, and
 - the trade-off of scientific rigour and messages that propel action (Keeley & Scoones 2000).
- Processes of knowledge generation & uptake are **infused with power** and can serve to sustain existing power structures (Jones 2009)

Top 4 factors that influence the management of livestock grazing

Northern Cape

- Drought / Fodder
 - Water
- Problem animals (Predators)
 - Stock theft

uKhahlamba Drakensberg

- Proximity to homestead
 - Stock theft
- Family grazing area
 - Grass and water



Economic losses of farmers in SA

Losses during the financial year in R'000 (concluded)

Province	Losses due to disasters and accidents regarding:		Piling and galling of crops	Predators	Stock theft	Veld and forest fires and natural disasters	Other losses
	Buildings and equipment	Other					
Eastern Cape	4 176	4 743	5 142	29 801	31 832	16 270	8 585
Free State	2 371	4 109	4 544	18 562	35 830	20 462	12 746
Gauteng	2 220	19 512	2 129	1 024	12 860	15 327	6 177
KwaZulu-Natal	4 625	4 606	14 978	6 119	26 509	36 695	17 237
Limpopo	1 343	9 513	12 161	6 185	6 618	12 260	11 289
Mpumalanga	7 206	10 022	10 072	8 389	23 207	35 276	19 180
North West	3 425	7 748	5 019	4 373	25 367	11 291	8 557
Northern Cape	5 199	3 737	2 782	36 600	15 414	7 739	13 350
Western Cape	4 091	20 096	8 480	103 987	13 975	34 181	45 638
South Africa	34 658	72 088	65 397	214 980	192 823	189 501	142 639

Census of Commercial Agriculture 2007

Stock theft

- Occurs mainly on commercial farms (50,0%) and communal land (17,5%), and less frequently in formal residential areas (11,6%) and informal areas (9,7%) (SAPS Crime Report 2010/11)

- KZN cattle keepers perceive stock theft as the most important threat. As a result most people keep their cattle on the lower hill slopes near the homestead (Salomon 2010)
- In Kamiesberg stock theft is less of a threat, probably due to lower density of people, and due to herders staying with herds in veld.

Why fencing is an unlikely solution

- [High cost](#)

- **Contestation**

Fences are **physical boundaries** that **monopolize** the use of a particular resource and **deny** them to other uses. Breaking down a fence is a sign of internal disagreement.

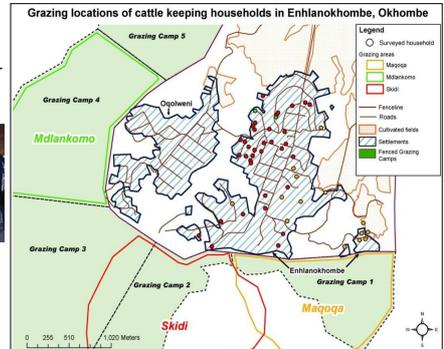
- **Throwing technology at a complex problem is not the solution**

The grazing camp starts above the fence. But people keep their cattle below the fence so they can't stray into the mountain and risk being stolen.

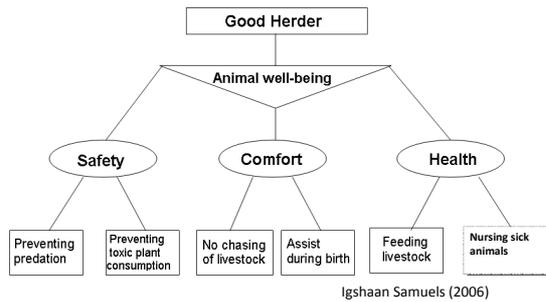


Fencing (cont.)

People in Okhombe were happy to get fences because they serve as "garage" for cattle.



Herding as (holistic) livestock management strategy



Herding (cont.)

- Improved predator control
- Reduced stock theft
- Improved biodiversity management
- Predator-friendly marketing for Karoo lamb
- Socio-economic spin-offs: long-term income for head of household - improved standard of living

Herding (cont.)

- Revive customary practice
- Traditional communities regulate people's behaviour through **norms and social pressure**, and promoting **cooperation and reconciliation** (norm-based governance) rather than monitoring and punishment based on written rules and management plans (rules-based governance) (Fernandez-Gimenez *et al.* 2008)



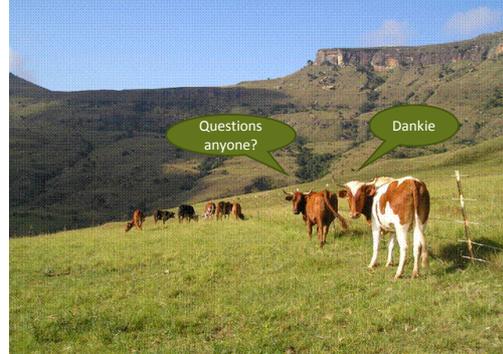
Herding: issues for consideration

- Compensation models:
 - stock owner pays
 - payment for ecosystem services
 - community/public works programmes
 - career path in agriculture for youth
- Appointing herders: who do you entrust with your herd
- Draw on indigenous knowledge of local land users for farm planning without fences, location of kraals in relation to watering points etc.
- Address needs of farming community

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Siyabonga



Cost implications for land reform farms

	Fencing	Handling facilities	Borehole and stock watering	Shedding and storage	Broiler and pig housing	Farmer housing	Total
Year 1 2008/2009	4,498,820.00	426,720.00	2,657,100.00	764,480.00	484,170.00	0.00	8,831,290.00
Year 2 2009/2010	2,350,000.00	282,000.00	940,000.00	188,000.00		42,400.00	3,802,400.00
Year 3 2010/2011	3,750,000.00	450,000.00	1,500,000.00	300,000.00		0.00	6,000,000.00
Year 4 2011/2012	3,200,000.00	384,000.00	1,280,000.00	256,000.00		0.00	5,120,000.00
Year 5 2012/2013	3,700,000.00	444,000.00	1,480,000.00	296,000.00		304,000.00	6,224,000.00
Total	17,498,820.00	1,986,720.00	7,857,100.00	1,804,480.00	484,170.00	346,400.00	29,977,690.00

CENTRAL SANDS LAND AND AGRICULTURE REFORM AREA-BASED PLAN (2007)

