

Savé Valley Conservancy: A Large-Scale African Experiment in Cooperative Wildlife Management

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The Savé Valley Conservancy (SVC) is a large (3442km²) cooperatively managed wildlife area, comprising multiple properties held by private ranchers, local councils, government and one community. The conservancy is located in the semi-arid South East Lowveld of Zimbabwe, occurring at an elevation of 480–620m, with deciduous woodland savanna, low and variable rainfall (474–540mm per annum) and poor-quality soils. The conservancy is bordered primarily by high-density communal land (of between 11 and 82 people per km²), with some commercial agriculture to the south and east (Pole, 2006).

Settlement and the development of the cattle industry

The area that is now SVC was originally inhabited by San (Bushmen), as indicated by the presence of San rock paintings (Pole, 2006). Bantu people settled in the area in approximately AD500 and ousted the San, though the area was generally sparsely populated because of low rainfall, lack of permanent water and the danger to people and crops from wild animals (Pole, 2006). European hunters and explorers first passed through the area in the 1870s to 1890s, and the settlers in the 'Moodie Trek' in 1892, named the area 'Hell's Wood' in response to the heat, malaria and thick bush. Wildlife was abundant, with significant populations of buffalo, lion, spotted hyaena, wild dogs and many other species.

During the 1920s, the area was settled by European farmers and three large-scale private cattle ranches were developed: Devuli, Angus and Humani. The remainder of what is now SVC was 'Crown Land'. By 1925, there were

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already 23,000 cattle on ranches in the area (Pole, 2006). The availability of cheap labour, abundant land and access to inexpensive livestock from stocks of indigenous cattle encouraged efforts to expand the beef industry, despite repeated outbreaks of foot-and-mouth disease (Phimister, 1978). In 1972, the remaining Crown Land in the SVC area was sold to individuals who planned to develop cattle ranches. The then Rhodesian government supported the cattle industry with direct financial assistance via subsidies, soft loans, tax concessions and support services. Further assistance to the livestock industry had been rendered in the 1970s in the Savé Valley where the Department of National Parks and Wild Life Management (DNPWLM) eradicated buffalo and most elephant to reduce the risk of foot-and-mouth disease transmission and damage to fencing respectively (Pole, 2006).

During the civil war of the 1970s, the cattle industry in the Savé Valley was impacted significantly by cattle rustling and the herd was reduced from 24,000 in 1975 to 5000 in 1979. After Independence in 1980, economic incentives from the Zimbabwean government for cattle ranching were reduced and stringent conditions were imposed by the European Community on beef exports. Concurrently, the South East Lowveld experienced a prolonged period of below-average rainfall. During those years, the ecological impacts of cattle ranching became apparent – cattle ranchers in Zimbabwe had traditionally established stocking rates based on ‘average’ rainfall years, which did not account for variable precipitation or competition from indigenous wild herbivores (du Toit, 2004). As a result, cattle were overstocked for decades, resulting in gully erosion, soil capping, increased run-off and the development of lower-productivity grass communities. Sensitive grazers such as reedbuck, Lichtenstein’s hartebeest, tsessebe, roan and sable disappeared from the Savé Valley area completely, while other wildlife species suffered from benign neglect and subsistence poaching. Predators were actively persecuted by cattle ranchers, with the effect that wild dogs were extirpated and cheetah, spotted hyaena and lion persisted only at low densities. Protectionist policies at the time prevented landowners from utilizing wild animals occurring on their land, which effectively devalued wildlife and exacerbated population declines (Bond and Cumming, 2006).

Emerging potential for wildlife production

In response to declining stocks of wildlife outside the state-protected areas, the Parks and Wildlife Act of 1975 conferred ‘appropriate authority’ status on landowners for wildlife that occurred on their land, replacing the earlier protectionist policies (Bond and Cumming, 2006). This law effectively meant that ranchers could utilize wildlife consumptively for profit, such as through

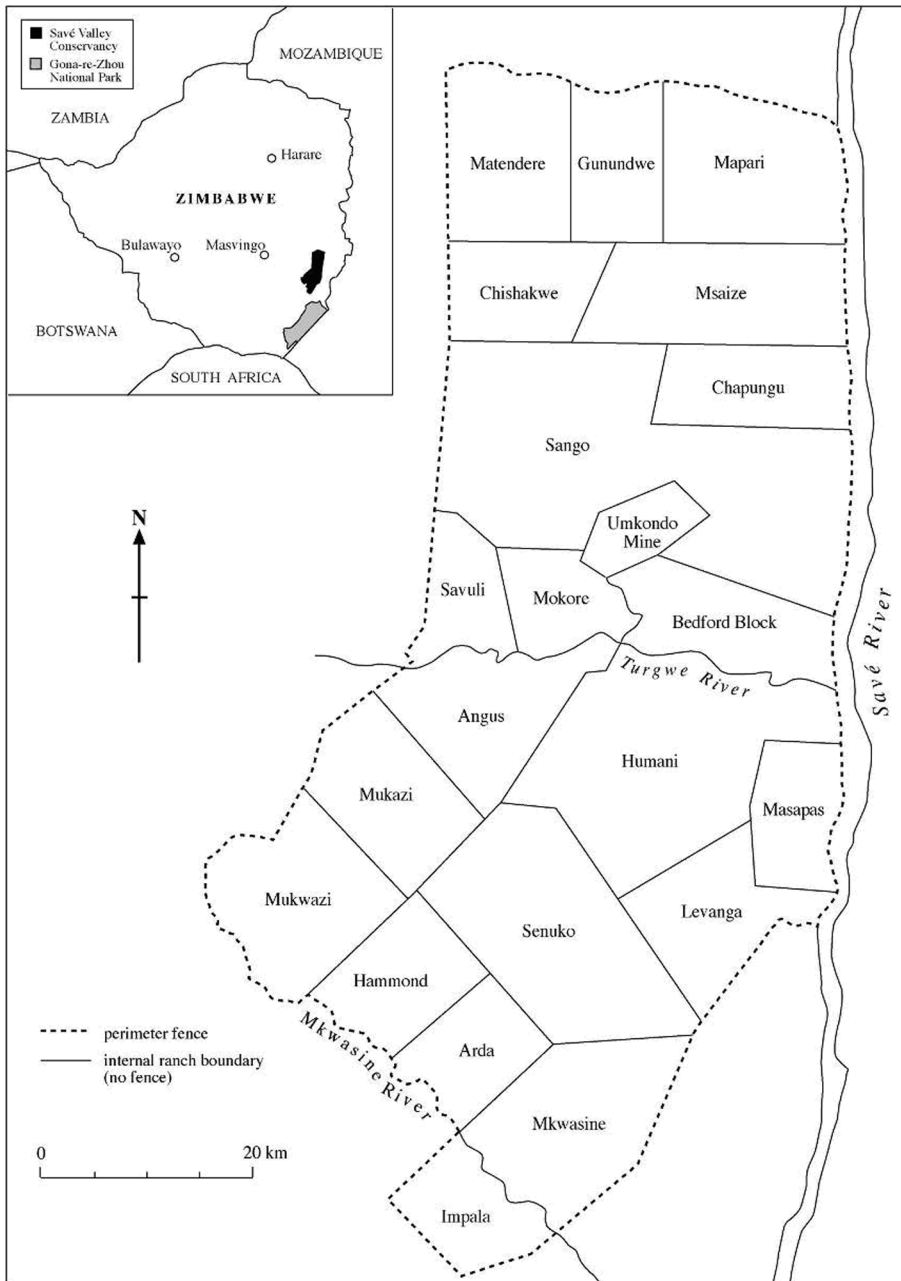
hunting or live capture and sale. The right to generate income from wildlife coincided with an increasing realization by some ranchers of the ecological problems associated with livestock ranching. Shortly thereafter, empirical evidence of the competitive advantage of wildlife over livestock began to emerge (Taylor and Walker, 1978; Child, 1988; Bond, 1993), particularly in arid areas (Jansen et al, 1992; Cumming, 1993).

The game-ranching industry began to develop in Zimbabwe in the 1960s, initially in the form of mixed livestock and wildlife production systems, and gained momentum in the 1970s and 1980s (Cumming, 1991). In the Savé Valley, two ranches started to experiment with wildlife as a land use and one rancher (Roger Whittall, Humani Ranch) introduced some waterbuck, giraffe, nyala and white rhinoceros to complement remaining populations of bushbuck, bushpig, duiker, eland, grysbok, impala, klipspringer, kudu, warthog and zebra. In addition to plains game, small populations of cheetah, elephant, hippo, spotted and brown hyaena, leopard and lion remained in the area.

Between 1986 and 1988, 20 black rhinoceros were introduced onto Humani Ranch as part of the Government of Zimbabwe's black rhinoceros conservation strategy, under a custodianship scheme whereby ownership was retained by the state. Meetings were held between Savé Valley landowners, WWF (formerly the World Wildlife Fund) and the DNPWLM to discuss the need for cooperative management of the reintroduced rhinoceros populations. These negotiations, along with leveraged funding provided by the Beit Trust for rhinoceros conservation, led to the development of a cooperative wildlife area or conservancy. Black rhinoceros were thus the 'flagship' species that catalysed the formation of the SVC. Shortly thereafter, a constitution for the nascent SVC was developed, which enshrined the need for cooperative management of wildlife resources while ensuring the sovereignty of individual ranches (see Figure 11.1). In June 1991, 18 ranchers signed the constitution and SVC was formed. A further 13 black rhinoceros were introduced shortly thereafter, and with a high rate of reproduction this population grew to over 100 by 2004.

The Beit Trust provided funds and technical support for the construction of the perimeter game fence, on the agreement that conservancy members would remove internal game fences (thus creating extensive range for the rhinoceros), and provide match funding for wildlife restocking within a stipulated period (du Toit, 1998). This agreement ensured that all members contributed to restocking (pro rata to their ranch areas) and avoided a situation where some ranchers retained fencing around their properties to prevent the loss of wildlife to non-contributing neighbours. The agreement was made with the belief that a concerted effort at restocking would move the conservancy more quickly to a situation where viable tourism operations could be established, and where the rhinoceros would become economic assets rather than liabilities.

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Source: Adapted from Pole et al (2004)

Figure 11.1 *Savé Valley Conservancy*

Following the formation of SVC, some ranchers decided to retain live-stock, pursuing a mixed species production system. However, in 1991–1992, the South East Lowveld experienced the worst drought on record, forcing ranchers to sell cattle at greatly reduced prices. A major cooperative effort was made by the landowners to save grazing wildlife species by importing hay from farms on the Central Plateau. During the drought, a strategic planning meeting was held by conservancy members and a decision was taken to completely remove cattle from SVC and to develop a multi-use wildlife production system for high-quality wildlife tourism.

Development of the conservancy

During the 1990s, a series of steps were taken to foster increases in the diversity and abundance of wildlife within SVC. With further catalytic funding from the Beit Trust, a security system (including personnel) was established to protect the black rhinoceros and control bush meat poaching.

A massive wildlife reintroduction programme was initiated, perhaps the most impressive component of which was the mass translocation of elephants from Gonarezhou National Park. During the 1991–1992 drought, DNPWLM had embarked on a elephant culling programme in Gonarezhou. Seeing an opportunity to obtain elephants for reintroduction into SVC, the conservancy chairman, Clive Stockil, proposed that SVC pay DNPWLM the amount they could expect to gain from the sale of skin, meat and tusks from culled elephants for live elephants. DNPWLM accepted the offer and the SVC immediately embarked on a fund-raising campaign. After initial attempts to capture elephants individually, a method was developed that enabled the capture and movement of whole family groups. This operation was the first time that whole family groups had been captured and translocated, and involved far more elephant than any other translocation operation before or since – 533 individuals were relocated to SVC.

Because the SVC then fell into the foot-and-mouth free (or ‘green’) zone, and because buffalo are long-term carriers of foot-and-mouth disease, a strong case was required to convince the Department of Veterinary Services (DVS) to permit their reintroduction into the conservancy. A case was presented (Price Waterhouse, 1994) that showed objectively that wildlife had a competitive edge over livestock with respect to returns per hectare, foreign currency generation and scope for the development of economic linkages between ranches and neighbouring communities. The report also demonstrated the crucial importance of buffalo to the viability of wildlife operations. The DVS agreed to buffalo reintroductions under stringent conditions – ranchers were required to remove all remaining cattle within the area and to construct a double game

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fence of set specifications (Foggin and Connear, 2003). By March 1995, the twin 350km game fences were completed, all internal fencing and remaining cattle were removed and buffalo reintroductions began.

During and following the elephant reintroduction, a major restocking programme of other wildlife species was also pursued. Twenty white rhinoceroses were introduced through a donor-supported arrangement whereby local communities would receive the receipts of trade in the progeny of the reintroduced animals (du Toit, 2005). In total, 3128 individuals of 13 wildlife species were reintroduced by the conservancy members (see Table 11.1).

Table 11.1 *Wildlife reintroduced into Savé Valley Conservancy, 1992–2006*

Species	By landowners	Through the IFC ^a loan	Total
Wildebeest	688	27	715
Elephant	553	0	553
Eland	478	18	496
Buffalo	179	247	426
Zebra	326	66	392
Waterbuck	283	78	361
Sable	252	104	356
Giraffe	137	6	143
Tsessebe	79	0	79
Nyala	64	1	65
Black rhino ^b	49	0	49
White rhino ^c	30	0	30
Lion ^c	10	0	0
Total	3128	547	3675

Note: ^a International Finance Corporation; ^b black rhino were provided by the Parks and Wildlife Management Authority as part of the national black rhino conservation plan; ^c 20 of the white rhino and all of the lion were introduced in 2005, which was several years after the next most recent wildlife reintroduction

Source: Pole (2006)

Teething troubles

During the early years of the conservancy, SVC members experienced a difficult transition period where income from livestock had ceased and wildlife densities were too low for high-quality ecotourism. Safari hunting was the most important economic activity during these years and enabled the conservancy to function and develop, though the low densities of high-value species (buffalo, in particular) limited revenues. Further restocking was required to increase the viability of wildlife as a land use and to permit high-quality ecotourism and safari hunting operations. With technical assistance from the Southern African Regional Programme Office of the World Wildlife Fund (WWF-SARPO),

SVC applied to the International Finance Corporation (IFC) for a restocking loan. Following completion of an environmental impact assessment and a process of public consultation, a loan of US\$1 million was approved. A stocking plan was developed and implemented, with the primary objective of increasing the diversity and the total biomass of indigenous wildlife, and an additional six species were reintroduced into SVC (see Table 11.1). Wildlife populations in SVC increased steadily in abundance and diversity during the 1990s, and revenues from ecotourism and safari hunting climbed correspondingly, facilitated by political stability and the increasing international exposure of SVC as a conservation success story.

The development of other conservancies in Zimbabwe

During the 1990s, the wildlife industry in Zimbabwe boomed, buoyed by favourable government policies and growing numbers of visiting tourists and hunters (Bond and Cumming, 2006). By 2000, an estimated 27,000km² of private land was used for wildlife production (Bond et al, 2004; Child, 2005), including several other large conservancies (see Figure 11.4). SVC and (later) Buby Valley moved most quickly and completely in developing wildlife populations and replacing livestock with wildlife-based industries.

The role of individuals in the development of conservancies

The formation and evolution of SVC and other conservancies depended on several catalytic and enabling factors, and teamwork among various stakeholders. Possibly the biggest catalyst for the formation of SVC was funding from the Beit Trust, via WWF, which re-enforced the rhino conservation programme, provided technical assistance and created incentives for landholders to amalgamate their properties. Significantly, the Beit Trust funding was flexible and provided over almost a decade, ensuring the scope to adapt the support to changing circumstances. Consultants were engaged at the appropriate times in the conservancy's development to tackle emerging needs, for example, the development of a memorandum of understanding (MoU) between the SVC and neighbouring rural district councils as a vehicle for community outreach efforts. The progressive attitude of the DVS, international recognition for the rhino-breeding success and growing interest of external investors in wildlife ranching propelled the conservancy along the route towards large-scale cooperative management. Later, input from advisers helped secure the crucial IFC restocking loan and more recently key guidance during the land reform programme of the Zimbabwean government.

Criticism of the conservancy approach

The development of the game-ranching industry and of conservancies in particular, was criticized in some quarters and sometimes suffered from a lack of political support (Bond et al, 2004; Cumming, 2005). A key criticism has been that conservancies are underutilized and undermine food security by wasting land that could be used to produce crops or domestic stock (Wolmer et al, 2003, 2004). However, such criticism fails to consider that conservancies are located on land that is generally unsuitable for agriculture due to low rainfall and/or poor soils and livestock-ranching enterprises have tended to rely on external (perverse) subsidies, are generally unprofitable in semi-arid areas, and have tended to result in a cycle of overstocking, ecological degradation and declining productivity (Bond et al, 2004). By contrast, wildlife-based land uses rely on the delivery of safari hunting and tourism that generate higher revenues (in the form of foreign currency) than livestock, which can contribute to national food security (in the same way as the non-edible tobacco crop that is grown in areas of greater agricultural potential than the Lowveld). Further added value may be derived from the live sale of animals, an activity that forms the basis for a large industry in South Africa and Namibia. These returns are less tightly coupled to rainfall than meat production, and are less susceptible to drought than those from livestock farming (Bond and Cumming, 2006). Well-managed wildlife production systems also avoid the ecological degradation typical of livestock production and are thus more sustainable (Bond et al, 2004).

Additionally, there is increasing potential for the local or international sale (from foot-and-mouth disease free areas) of venison as a low fat, free range alternative to meat from domestic animals (Radder, 2002). The sale of affordable meat to local communities from trophy-hunted animals and through the annual harvest of overabundant species can also make a contribution to local protein requirements.

Additionally, a review done during the early 1990s indicated that both the volume and quality of employment opportunities is greater for wildlife production systems than for livestock, and there is no reason to believe that this situation does not hold true today (Price Waterhouse, 1994). If current trends and plans to expand SVC to amalgamate community land and to incorporate community involvement through allocation of shareholdings continue, communities will benefit from opportunities to become wildlife producers and tourism operators.

The electric fencing erected around conservancies has been criticized as representing a symbolic exclusion of impoverished communities by wealthy landowners (Wels, 2000; Wolmer et al, 2003; Spierenberg and Wels, 2006). While the concept of 'moving beyond the fences' to involve and benefit

communities from wildlife management is important, the practical significance of fencing must also be considered. In the context of 'hard edge' wildlife areas such as SVC where the boundary of the conservancy abuts densely populated communal land, perimeter fencing is vital for preventing human-wildlife conflict and uncontrolled hunting of wildlife that may wander beyond the borders of the conservancy. Furthermore, the fencing around SVC is a statutory requirement to prevent disease transmission to livestock occurring in neighbouring areas.

Ecological and financial benefits of the conservancy approach

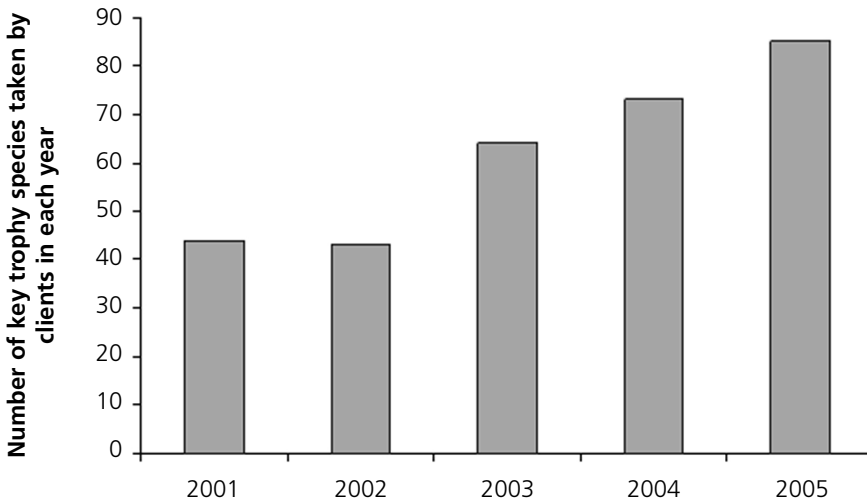
SVC illustrates both the financial and ecological advantages of scale associated with cooperative conservancy arrangements relative to isolated fenced game ranches.

Financial advantages of conservancy scale

The large size of SVC permits the reintroduction of large, charismatic species such as buffalo, elephant and lion, which are key revenue drivers for tourism and trophy hunting (see Figure 11.2) and the pooling of land units permits the marketing of a 'wilderness' experience, which is attractive to both photographic and hunting tourists (du Toit, 2004; Lindsey et al, 2007a, 2007b). The large size of SVC also permits economies of scale that reduce management costs. For example, less fencing and fence maintenance is required, fewer artificial water-points are needed, one annual census can be done for the whole area and the larger land area can support the expensive infrastructure required for high-end tourism (du Toit, 2004).

Ecological advantages of conservancy scale

The conservancy permits the effective conservation of a wider diversity of species than would be possible in smaller land units, as no single ranch encompasses the diversity of habitats found in the conservancy as a whole. The scale of SVC can enhance the resilience of the area to ecological shocks such as fires or droughts by enabling herbivores to make use of patchy primary production resulting from sporadic rainfall (Bond et al, 2004; du Toit, 2004), and by enabling the re-establishment of functional predator-prey relationships. SVC is once again home to significant populations of wild dogs, leopard, cheetah and increasing numbers of lion and spotted hyaena. Predators effectively reduce the amplitude of population fluctuations in non-migratory prey species by preventing overpopulation during high-rainfall years, which may prevent



Source: Technical Advisory Committee, SVC

Figure 11.2 *Key trophy species hunted by foreign safari clients, 2001–2005*

population crashes during droughts (Mills and Funston, 2003). Larger areas are more able to support viable populations of wildlife than isolated game ranches, and can host larger populations that are more resilient to stochastic events and are less likely to require augmentation or further reintroductions, and do not require management intervention to prevent inbreeding. Coordinated and cooperative wildlife management has largely prevented issues such as the introduction of extra-limital species, inbreeding or the intentional cross-breeding of closely related species, the breeding of aberrant colour morphs or the persecution of predators, which have reduced the conservation value of game ranching in South Africa (Bond et al, 2004; Lindsey et al, 2007a).

Conservation achievements of SVC

SVC is home to sizeable wildlife populations, including several species of conservation significance (see Table 11.2). There are now nine packs of African wild dogs, occurring at one of the highest densities of that species in the world (Creel and Creel, 2002; Pole, 2006), which had been effectively eradicated from SVC during the cattle production era. Given the high costs and low success rates of wild dog reintroductions in other protected areas, this is one of SVC's more important achievements (Lindsey et al, 2005). SVC also has the

largest rhinoceros population in Zimbabwe. Lions recolonized the conservancy from Malilangwe in the south, and the population is increasing rapidly, and the geographic distribution of elephants within Zimbabwe was boosted by approximately 6 per cent following the SVC translocation.

Table 11.2 *Minimum SVC population estimates for wildlife, livestock and human settlements*

Species	Population
Wildlife	
Impala	17,191
Zebra	5075
Wildebeest	4927
Buffalo	1785
Warthog	1426
Eland	1424
Kudu	1150
Elephant	1117
Giraffe	781
Waterbuck	735
Sable	214
Black rhino ^a	120
White rhino ^a	31
Human habitations	4027
Domestic stock	
Cattle	9986
Goats	4715

Note: ^a Known population sizes derived from ongoing monitoring

Source: Joubert and Joubert (2006)

Neighbour relations and political issues

A land use experiment of the size of SVC could not be developed anywhere in the world without raising issues regarding relations with neighbours and official national policies. In Zimbabwe, the further development of the wildlife industry has been constrained by interrelated political and economic tensions. These tensions are associated with a racially inequitable landownership pattern arising from the colonial era. They were present as undercurrents (but not limiting factors) during the early 1990s when the conservancy was established by predominantly white landowners. Many of these landowners had recently bought land in the conservancy, with certificates of approval from the government, and were therefore not inheritors of colonial estates. The architects of

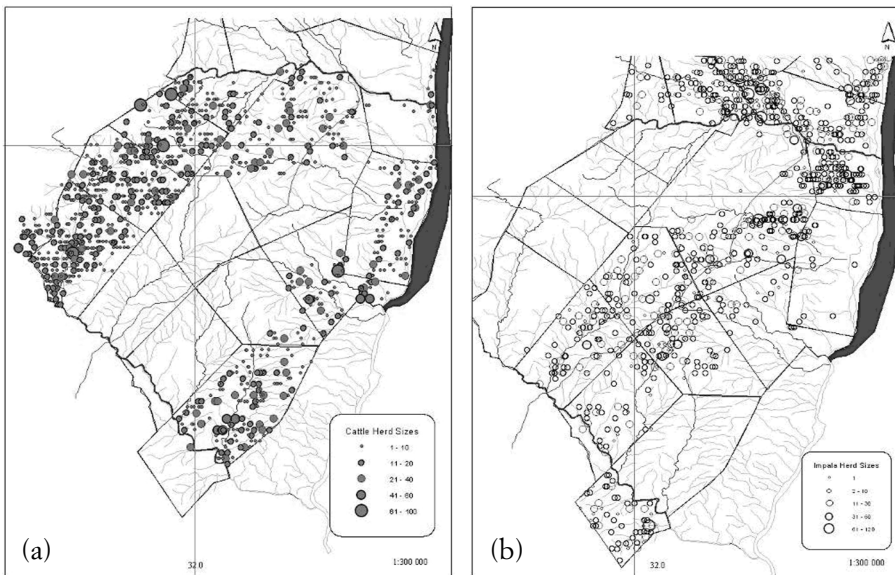
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the Lowveld conservancies (i.e. the individual ranchers who led the process and the NGO representatives who supported the process technically and financially) were sensitive to these political undercurrents and to the need to make the conservancy relevant to the livelihoods of neighbouring communities. Prior to the Beit Trust funding the development of SVC, political assurances were formally sought and obtained at ministerial level regarding the government's approval for the development of large-scale commercial wildlife projects on semi-arid private land. Clearly, however, these assurances did not reduce the need for community outreach at the local level.

The pace of development of the SVC outreach programme was governed by several factors, of which the most significant (often overlooked by critics of the Zimbabwean conservancy initiatives) is the inevitable inertia involved when a disparate group of landowners is required to make joint decisions on land use transition. The conservancy could not simply spring into existence overnight with all economic, ecological and socio-political aspects being adequately dealt with. Some ranches within the conservancy contributed to community outreach from an early stage by providing direct assistance to small-scale projects such as irrigation schemes, scholarships and community embroidery schemes (Anderson, 2007). Community access was also facilitated on some properties to enable the controlled extraction of renewable resources such as firewood, reeds and edible caterpillars. A significant achievement of SVC community engagement efforts was the establishment of the SVC Trust in 1996. The SVC Trust arose following the signing of a formally negotiated MoU between SVC and the five neighbouring rural district councils (Bikita, Buhera, Chipinge, Chiredzi and Zaka), and has several objectives, including: 'fostering cooperation and communication between the SVC and its neighbouring communities through beneficial and durable economic relationships' (SVC Trust, 2000). The SVC Trust was established as an accountable, not-for-profit body administered by a board of trustees, comprising members from each of the councils, members of parliament, district administrators, traditional leaders and influential citizens. A key initiative of the SVC Trust is to develop a wildlife endowment scheme, where funds are raised to purchase wildlife for reintroduction into the conservancy. The progeny of the restocked wildlife would be regarded as tradable assets of the SVC Trust. In light of current negotiations, these assets are likely to be converted to shareholdings in a new business structure proposed to control the wildlife use rights within SVC and to share earnings between owners and the Trust beneficiaries.

Despite these initiatives, the overall impact of outreach efforts has been limited by the fact that the learning curve regarding community outreach was interrupted by a steep decline in political tolerance for landownership by whites in Zimbabwe. This created a risk that outreach efforts would be derailed, resulting in a lose-lose scenario, rather than a situation where both

SVC and communities could benefit. SVC reflected the problem of racial imbalance at that time – 41 per cent was owned by white Zimbabweans, 54 per cent by white foreign investors and 5 per cent by the government. Landownership was turned into a political flashpoint by the ruling party during a period of challenge by the opposition party in 1998–2000, with the result that private land, including SVC was targeted by the government’s ‘fast track’ land reform programme. By December 2002, five ranches in SVC (Mukwazi, Mukazi, Angus, Chigwete (part of Humani Ranch) and Mkwazine) had been taken over by peasant farmers and three others (Levanga, Masapas and Senuko) were partially settled, comprising a total of 33 per cent of SVC (see Figure 11.3). Other Lowveld conservancies were also affected to varying degrees. Resettlement within SVC and the political and economic instability stemming from the land reform programme in the country as a whole has had several major impacts on SVC.



Source: Joubert and Joubert (2006)

Figure 11.3 Distribution of (a) settlers' cattle and (b) impala in the southern half of Savé Conservancy, 2006

Disruption of the community outreach programme

With the rights of stakeholders blurred by the radical shift in land tenure, the development of the community outreach programme was stifled. The SVC Trust was derailed because of political allegations that it had been put in place

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merely as a smokescreen behind which the conservancy hoped to escape land reform.

Increases in bush meat poaching

When the settlers arrived in SVC, the game scouts were quickly prevented from conducting anti-poaching patrols in resettled areas. The last few patrols undertaken on those properties revealed massive levels of snaring for bush meat, often with wire taken from the conservancy fence. During the settlement process, approximately 80km of the double perimeter fence was removed, corresponding to 1280km of wire (enough to produce more than 420,000 snares). Between August 2001 and February 2007, a minimum of 3836 animals were killed on the ranches still run by the original owners (unpublished SVC records). Poaching levels on resettled ranches were undoubtedly much higher – aerial survey data indicates that wildlife populations in those areas have been virtually eradicated (see Figure 11.3b).

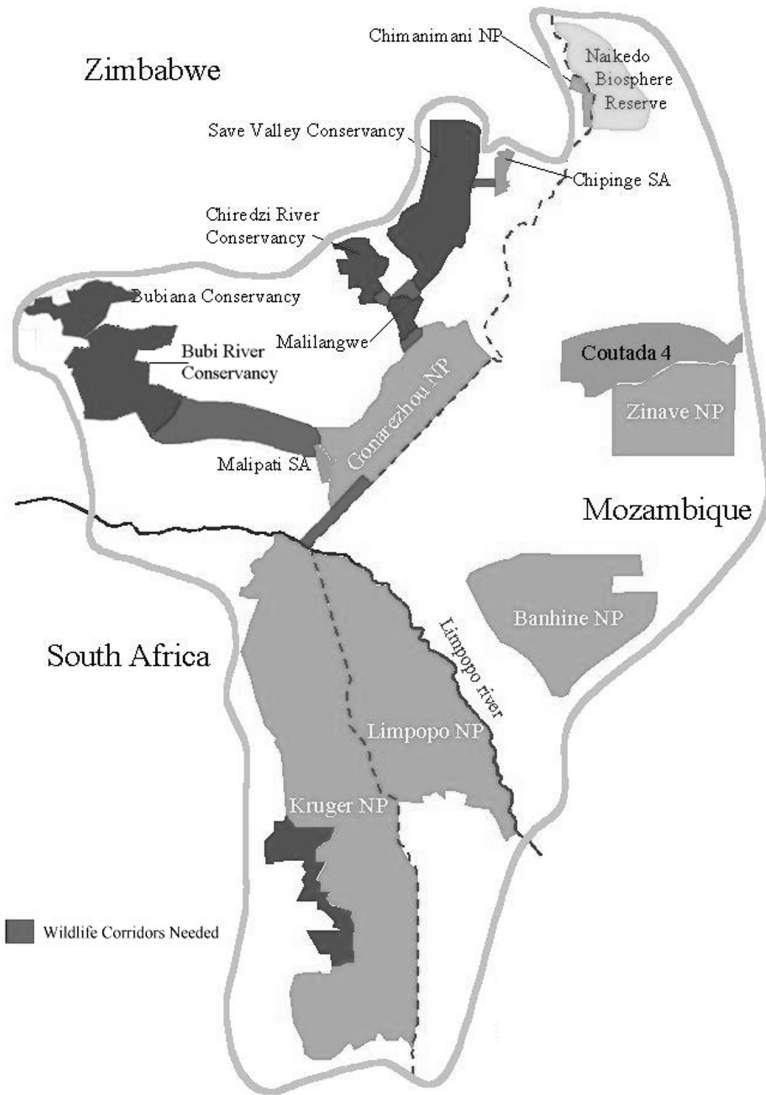
Seven years after the onset of settlement within the conservancy, levels of bush meat poaching continue to be extreme. Between August 2005 and February 2007, 2191 incidents of poaching were recorded in SVC resulting in the removal of 13,920 snares and the death of at least 1125 animals. Incidents of poaching are more than twice as frequent on ranches adjacent to resettled properties. Wildlife populations in the south of the conservancy (south of the Turgwe River) are declining, whereas those in the north, away from the resettled areas are stable (Joubert and Joubert, 2006).

Habitat destruction and loss of connectivity

Large areas of woodland have been cleared for subsistence farming within SVC. Due to the poor nutrient content of the soils, resettled farmers practise slash and burn agriculture to boost yields, resulting in the increasing land clearance. The settlement of Chigwete and Masapas ranches in the centre of SVC threatens to prevent wildlife movement between the northern and southern halves of the conservancy, and the occupation in the south-eastern part of SVC (Mkwasine and parts of Senuko and Levanga ranches) jeopardizes connectivity between SVC and the Great Limpopo Transfrontier Area (see Figure 11.4).

Disease outbreaks

By 2006, an estimated 14,700 domestic stock had been moved onto settled ranches within the conservancy (see Table 11.2 above), greatly increasing the risk of transmission of diseases between wildlife and domestic animals. The breakdown of foot-and-mouth disease controls in SVC and other wildlife areas around the country led to a cessation of beef exports from Zimbabwe to the



Source: Derek de la Harpe (pers. comm.)

Figure 11.4 *Zimbabwean Lowveld conservancies and the Great Limpopo Transfrontier Conservation Area*

European Union in 2001 (du Toit, 2004). Two outbreaks of foot-and-mouth disease have been recorded in the communal land neighbouring the conservancy since the settlement began (Foggin and Connear, 2003). In addition, in 2005, three wild dogs from a single pack in the southern part of SVC died of symptoms resembling rabies and the pack subsequently disappeared.

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Subsequently in 2007, a rabies outbreak in the adjacent Malilangwe Trust resulted in the disappearance of three packs of wild dogs. Finally, a major anthrax outbreak was recorded in SVC/Malilangwe in 2004, related to the breakdown of vaccination programmes in neighbouring communal areas, attributable to the failing economy resulting from the land reform programme.

Human–wildlife conflict

The southern part of SVC now represents a mosaic of natural habitat used for wildlife production and subsistence farming, resulting in conditions conducive to human–wildlife conflict (HWC). The removal of portions of the perimeter fence by the settler farmers has greatly increased HWC in neighbouring communal lands. In SVC, the conflict has been manifested by fatal encounters between humans and wildlife (at least 40 human deaths in or near SVC due to wildlife since 2000), crop damage and livestock depredation (Lindsey, 2007). In response to crop damage, several elephant bulls are killed in problem-animal control operations every year, significantly reducing potential revenues from trophy hunting each year (Lindsey, 2007; Martin, 2007). Settler farmers living in the conservancy no longer employ traditional (conflict-reducing) husbandry techniques employed effectively elsewhere (Woodroffe et al, 2006); and as the lion population increases, complaints of livestock losses appear to be increasing in frequency, resulting in the risk of predators being poisoned by affected farmers.

Major drop in tourism revenues

With the onset of the political turbulence in Zimbabwe, revenues from tourism declined dramatically. In 1999, ecotourism was the primary source of revenue for four ranches in SVC and comprised a significant component of income on another seven properties. By 2004, all of the ranches in SVC relied primarily on income from trophy hunting. The hunting industry has proved to be considerably more resilient to political instability than ecotourism. With the onset of the land reform programme, tourist occupancy in Zimbabwe fell by 75 per cent, whereas trophy hunting revenues dropped by only 12 per cent (Booth, 2002; Bond et al, 2004). In SVC, trophy hunting revenues on the ranches not affected by land reform increased after 2000, due to increasing populations of buffalo, permitting the sale of more high-value ‘dangerous game’ hunts (see Figure 11.2).

Erosion of property rights dissuading investment

In 2005, the government declared that all agricultural land owned by Zimbabwean nationals belonged to the state, and white farmers continue to be evicted from their properties. Though no further evictions have occurred in

SVC since 2002, the uncertainty of tenure has stifled further investment and reduced enthusiasm for the nascent community outreach initiatives. The resettled farmers in SVC face similar uncertain tenure over the properties they occupy, which, in combination with open access to natural resources has encouraged unsustainable bush meat hunting.

The future

As will be obvious from the issues outlined above, the future of SVC as an experiment in large-scale cooperative wildlife management depends greatly upon the resolution of pressures arising from the land reform programme. Specifically, the future of SVC will depend on the extent to which the conservancy can incorporate and benefit a broader range of stakeholders, especially local communities, through arrangements that retain business viability.

The government has recently reversed its stance on the resettlement of conservancies for small-scale agriculture and has stated that Lowveld conservancies will remain wildlife production zones. After a series of discussions between conservancy representatives, government officials and technical advisers, the Zimbabwean Cabinet approved a short general policy statement on wildlife-based land reform in 2005. The Ministry of Environment and Tourism has been tasked with the development of guidelines to implement this policy statement. Commencing in early 2006, under the auspices of the Ministry of Environment and Tourism, progressively more detailed discussions have been taking place within the group of government officials, conservancy representatives and non-governmental advisers. At present, various models for wildlife-based land reform have been proposed by the government, including a variety of combinations of current landholders, neighbouring communities, the Parks and Wildlife Management Authority (PWMA, formerly the DNPWLM) and indigenous entrepreneur investors.

All of these models require conservancies to engage with neighbouring communities and provide a continued role for those landowners who have not already been evicted from their ranches. A continued role for existing landholders is important, as this would enable the retention of expertise and functioning tourism operations while new entrants are eased into the industry. Since private land has been nationalized, the primary assets that remain as tradable commodities (as identified in the current policy statement) are wildlife populations. Arrangements are thus being developed to form new corporate structures that manage and trade the use rights for these wildlife assets. Shareholdings are envisaged for existing operators, for community trusts (thus the SVC Trust has regained political recognition) and for black entrepreneurs who wish to buy shares. Shares could also be acquired by adding wildlife or

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land to the conservancy, which is the most feasible route by which PWMA would become a partner (notably, through the inclusion of Chipinge Safari Area, east of SVC). Large shareholders would undertake commercial wildlife operations within the conservancy, based on the wildlife use rights that arise from their shareholding. Practical requirements for the effective functioning of the SVC include the need for rational alignment of wildlife and agriculture and repairing the boundary fence where it has been removed.

These concepts are still evolving and the final form of the arrangements for wildlife-based land reform cannot be stated with certainty. However, irrespective of the composition of shareholders and of where the conservancy boundaries are re-established, SVC will need to renew its community outreach effort through measures such as those outlined below.

Developing durable business partnerships with neighbouring communities

As outlined above, the SVC Trust should be included as a shareholder in any a new corporate structure. A minimum 10 per cent shareholding for the Trust is currently envisaged and would provide dividends related to wildlife populations within the conservancy (providing the incentive for communities to reduce poaching). In addition, there is scope for SVC to be expanded to include portions of community land. Negotiations between SVC and the Nyangambe community (adjacent to Hammond ranch) have already resulted in the decision by that community to incorporate approximately 25km² of land into the conservancy. There are other such opportunities around other parts of SVC, despite generally high human population densities. These areas would have to be restocked by SVC, adding to the community shareholding and providing direct business opportunities for trophy hunting and ultimately ecotourism – especially those linked to cultural tourism possibilities. Finally, joint ventures could be developed, such as out-grower vegetable schemes to supply safari camps, micro-industries such as tanneries and craft production (A. Sithole, pers. comm.).

Other contributions to neighbouring communities

Communities in the South East Lowveld suffer regular food shortages due to low and irregular rainfall and the lack of irrigation (Cumming, 2005). Food shortages, increasing poverty levels and ineffective legal deterrents combine to ensure that SVC experiences severe levels of poaching for bush meat, most of which is sold locally. Bush meat poaching is extremely inefficient: for every animal successfully extracted by poachers using snares, four others are killed and not recovered. If the illegal offtake of bush meat could be replaced with a

sustainable legal source of bush meat, SVC could contribute a constant supply of protein to neighbouring communities and the impact on wildlife populations would be lower. For example, SVC could remove 50 or more elephants annually to limit population growth and obtain a supply of meat for distribution to neighbouring communities (Martin, 2007). It has been proposed that elephant meat would be granted to the SVC Trust, which could sell it at a subsidized price to local communities to generate funds for community development projects.

Developing channels of dialogue between SVC members and their neighbours

Ranch/ward subcommittees within the conservancy should be established and regular meetings should be held between ranchers, neighbouring community leaders and local politicians. These forums would enable ranchers and community members to get to know one another and enable discussion of both problems and potential avenues for cooperation.

Developing comprehensive education and awareness programmes

Education programmes are obviously important in raising awareness of conservation issues and of the potential importance of wildlife to local community development. Interviews with local communities revealed misconceptions relating to wildlife and conservation, such as the belief that bush meat poaching has no impact on wildlife populations (S. Matema, pers. comm.). During these interviews, community members have indicated that the opportunity for their children to view wildlife would constitute a valued benefit from SVC.

Conclusions

SVC is an experiment in progress and cannot yet be said to be a tested model for cooperative wildlife management in southern Africa, though it has achieved significant gains for biodiversity conservation and has the potential to act as a key contributor for local community development. These achievements and potentials are, however, dependent on a favourable resolution of the political processes under way at the time of writing in Zimbabwe. If SVC survives the political furnace in which the experiment is currently being forged, it will illustrate important lessons for other countries in southern Africa where similar challenges exist, or can be expected to arise in the near future.

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