

Introduction

First, I extend my gratitude to the Rigby family, the donors to the Robin Rigby Trust and the Trust Committee for having made this project possible. It was a wholly fulfilling experience for me, and reminded me how much I love Cape Town. I am also grateful to the Kommetjie Environmental Awareness Group (KEAG), in whose offices I was based. Many thanks to Patrick Dowling who was the primary author of the proposal, and Wally Petersen who guided me in carrying out the project.

This project aimed at contributing to existing efforts to improve the condition of selected public natural coastal spaces and improve public access to coastal areas around Kommetjie, in the greater Cape Town area of South Africa. In the process, we aimed to provide employment and training to local people from poor communities, while ensuring that the benefits of their work could be experienced by a broad range of people. We were able to complete all the planned project activities (with some modifications due to season) during the time frame.

The organizations which collaborated on this project are the Whale Release and Strandings Group, Newfoundland (www.newfoundlandwhales.net), through which the funds were transferred, the Kommetjie Environmental Awareness Group (KEAG - www.keag.org.za) as the primary partner and the Wildlife and Environment Society of South Africa (WESSA - wessa.org.za) as a secondary partner. The Kommetjie Residents' and Ratepayers' Association (KRRRA) was kept informed about the project, and various local residents participated in different ways.



Figure 1 a) Cape Town's location in South Africa; b) Kommetjie's location on the Cape Peninsula; c) The Kommetjie area, showing Ocean View and Masiphumelele townships

Activities

Creating jobs

We hired a small company called Masizame Alien Clearing based in the underprivileged township of Masiphumelele to remove large alien trees from a local wetland. We hired four other people from Masiphumelele to carry out the bulk of the remaining work. They named themselves Isiqalo Project (*isiqalo* means “the beginning” in the Xhosa language). The opportunities for these people, who came into the city from Eastern Cape province, one of the poorest parts of the country, are otherwise quite limited due to their lack of formal training and education. For the dune stabilization project we hired several additional people from another poor township called Ocean View. We also hired current underemployed but bilingual KEAG staff as interpreters to help with project start-up and training.



Figure 2 a) Frances Moni, owner of Masizame Alien Clearing, removing invasive alien plants in a dune slack wetland; b) Isiqalo Project team: Nothandile, Zuko, Nancy (supervisor) and Ntombela

Removing invasive alien plant species

Invasive alien plant clearing by the City of Cape Town is often done with mowers, which simply allow the aliens to regrow more vigorously. We hired Masizame Alien Clearing to permanently remove large and small aliens from the Skilpadsvlei wetland, a rare “dune slack wetland” that forms seasonally between sand dunes.

I purchased a tree popper for KEAG, which pulls alien trees out by the root (thereby preventing re-growth). The Isiqalo Project team used this tool to permanently remove aliens from a sandy public open space adjacent to a large intersection at Kommetjie Boulevard, and just upstream from the estuary of the local Bokram River. Their work at the river was interrupted by the appearance of a City excavator that, in the interest of flood control, pulled all of the vegetation (alien and indigenous!) out of the river and from the riverbank opposite to where our team was working. This was a shock to the team, but they had accomplished what they needed to on their bank (and did a much neater and more responsible job of it than the City machine!).

In addition to the impacts of alien plants on indigenous biodiversity, local people consider the presence of densely-growing invasive alien trees as both a fire danger (some burn at very hot temperatures) and potential hiding places for criminals. Clearing these aliens permanently therefore

promotes growth of indigenous species, improves safety and perceived safety for local people, and in itself creates sustainable public open spaces for people of all walks of life to use.



Figure 3. “Before”: Public open space at Kommetjie Boulevard covered in invasive alien plants, particularly Port Jackson (*Acacia saligna*). Judy, our interpreter, got to try out the tree popper this day!



Figure 4. Zuko clearing invasive *Sesbania punicea* from the downstream area of the Bokram River

Planting indigenous vegetation

We created indigenous gardens at Kommetjie Boulevard with the help of donations and discounts from local nurseries (Good Hope Nursery and Harry Goeman’s Nursery). Our plan was to replant several small, circular beds. The situation changed, however, when a local, enthusiastic yet ill-informed resident decided to take action without our knowledge. He invited a municipal grader to alter the landscape in a poorly-judged attempt to create a wetland. The machine tore a huge strip off the landscape, leaving an enormous scar, and large tire tracks over our carefully positioned and measured garden plots (prior to planting, thankfully). Moreover, the strip torn off was on the side of an incline, meaning that water will not naturally gather in that area to form a wetland. Our team

mobilized immediately to try to repair the error, softening the landscape, replanting indigenous grasses that had been torn up, and erasing the tire tracks. The result of this over-eagerness was a much larger “garden” than we had planned and budgeted for. Trying to make light of the situation, we named it the Highway.

We bought plants to fill our measured garden plots, and to disperse throughout the Highway. We have informed the municipality of our work and they have offered to donate between 50 and 100 indigenous trees which KEAG will plant in various locations at a later date. We avoided an incident with a municipal tractor-landmower thanks to Nancy, the Isiqalo Project supervisor, who blocked access to our plants. That showed that our workers really took ownership over the project. We have put barriers and mulch around our garden plots to make them very distinct, although we expect the plants to have grown substantially before any other large machines return to the area.

We specifically purchased hardy dune plants that require no maintenance. We saved our planting efforts until the end of April, just before the winter rains. As if we had planned it, the rains began two days after we did the planting.



Figure 5. "After": Our hardy indigenous gardens have replaced the invasive alien plants in the sand at Kommetjie Boulevard. a) Team members plant themselves in their gardens; b) One of our defined indigenous garden plots, with the softened and replanted "Highway" in the background

Creating pathways

Also at Kommetjie Boulevard, with donations from the City and local businesses (The Pole Yard and Burchwoods Lumber) we created three small bridges over seepage areas and a pathway that will allow people to use the area without having to walk on the road. Prior to my departure, the public had already started to use these bridges and pathways.



Figure 6. Building bridges with donated materials



Figure 7. Creating a footpath through the public open space at Kommetjie Boulevard

Stabilizing sand dunes

Because of the time of year and immediate priorities, instead of stabilizing the dunes in Kommetjie itself using beach kelp, we decided to build on a dune stabilization project that KEAG had undertaken in previous years at Witsands Beach, south of Kommetjie (see Figure 1b). That beach is the site of a poorly-located old municipal dump. The sand constantly shifts in the area, which exposes the garbage, allowing it to blow into the ocean. Furthermore, every winter after the rains, a seasonal river opens up and washes the garbage out to sea. Relocating the dump is not financially possible for the City at the moment. As an interim measure, KEAG has been creating fences, or hedgerows, annually to alter the distribution of the sand in order to cover the garbage. Because City funds were not forthcoming in time to carry out the activities this year prior to the rainy season, we incorporated this activity into our project.

We transported seedless branches that Masizame had cut at Skilpadsvlei, to Witsands to build several additional hedgerows in areas where we could see that the garbage had been exposed. We oriented the rows based on the direction of the prevailing winds, to enable sand to build up in exposed areas. Within a few days, we already noticed that sand had begun to cover these exposed areas. KEAG will continue to monitor this area.

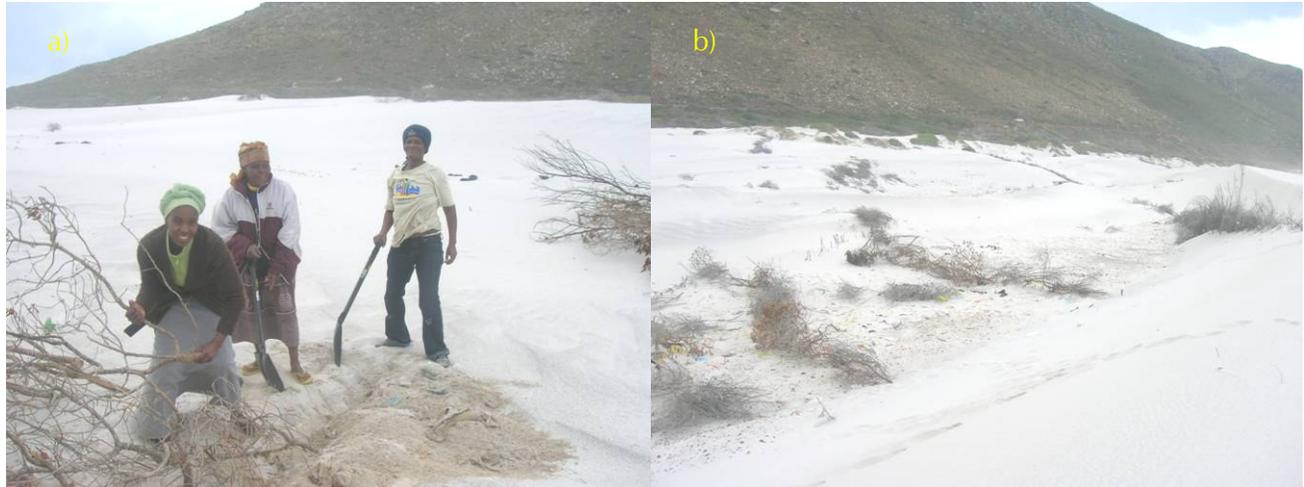


Figure 8 a) Building hedgerows at Witsands beach with seedless branches from alien trees cut at Skilpadsvlei; b) Our completed rows are constructed to allow wind-blown sand to build up in areas where garbage is exposed

Training local people

Seeing that Frances Moni, owner of Masizame Alien Clearing, had a relatively ad hoc way of operating, largely due to a lack of formal training, we provided her with information on how to calculate and present quotations and invoices, and how to keep attendance registers for her staff. We also gave her record-keeping books, templates and business cards.

We gave the Isiqalo Project team on-the-job training regarding invasive alien and indigenous plants, organic gardening, path creation, bridge construction and dune stabilization. We enabled them to participate in hands-on river health studies, both off-site and at the Bokram River where they had been working, and we did exercises with them on ecology and food webs. We took them to visit a local gardener who showed them how they can plant organic food gardens in small, recycled containers. We hired a trainer to do a career planning workshop with them, specifically designed for people who do not read or write. Finally, we brought someone in to do a workshop on fire safety, and invited other KEAG and affiliate staff from Masiphumelele and Ocean View to take part, as fire is a major danger in high-density townships.



Figure 9 a) Career planning workshop and b) fire safety workshop, both with Daniel as interpreter



Figure 10. Our team participating in hands-on river ecology exercises to measure river health

Awareness about the project

We created interpretive signboards to raise awareness about the important coastal habitats we restored, and a sign to be placed in areas where KEAG's employees are working on an environmental restoration project. I wrote articles about the project for the False Bay Echo - a local newspaper, and the KRRA newsletter. I have also written an article, currently undergoing final edits, about KEAG's job creation and environmental activities for a Canadian magazine called Briarpatch. I have mentioned the Robin Rigby Trust, KEAG and Masizame Alien Clearing wherever appropriate.

Our project activities are featured on the following websites:

www.poleyard.co.za/communitywork.htm

www.zandvleitrust.org.za/art-

[allys%20GIS%20education%20mini%20sass%20course%20april%20%202009.html](http://www.zandvleitrust.org.za/art-allys%20GIS%20education%20mini%20sass%20course%20april%20%202009.html)



Figure 11 a) One of the signs printed to place at KEAG project sites; b) My articles in the False Bay Echo and the Kommetjie community newsletter

And more!

As a result of the career planning workshop, I got a better idea of the interests and inclinations of the Isiqalo Project team members. One of the individuals has a keen interest in working with livestock, so I connected him with the person who runs a barnyard next to the KEAG office. We also provided reference letters to the two younger team members to take with them to a youth employment skills program. The career planning workshop leader prepared CVs for each of the team members which they can use to present themselves to other potential employers.

During my stay, I also provided assistance with KEAG's craft-from-waste program, provided computer support, edited educational documents, helped to write funding proposals for other projects, and provided mediation services.

Furthermore, I developed linkages with the South African Whale Disentanglement Network and the Dolphin Action Protection Group, and communicated information about them and their approach to the Newfoundland Whale Release and Strandings Group.

Outcomes and Benefits

...for the community

The Isiqalo Project team members and others who were involved with the project expressed their gratitude for having been given the work and training opportunities. They gained experience in working on a number of different projects from start to finish, and one of them gained experience as a supervisor, which should be useful to her in her future career. It was clear that the team members bonded over the course of the project, and had a sense of ownership and pride in the work that they had done and the areas they had restored. The interpreters who worked with me expressed that the project really made a difference to the people who participated in it, particularly because of the training and opportunities we provided. The interpreters also benefited from the content of the workshops they translated, and can add their interpretation experience to their CVs. Patrick Dowling, with whom I wrote the original proposal, informed me that following this project there is a "new spurt of interest in community gardening [and] pathways" among Kommetjie residents.

...for coastal conservation and understanding

We specifically designed the projects to be focused and achievable, with visible results. Our positive impacts are already clear. We replaced invasive alien plants with indigenous plants, we created safe and sustainable pathways for people to use, and we created fences using natural materials along sand dunes to cover garbage to prevent it from going in the ocean. In the process, we provided employment to a number of otherwise unemployed people, and offered them training and opportunities that have educated them about environmental issues and should strengthen their future employability.

Based on comments from local residents, people found it very interesting that someone had come all the way from Canada to carry out environmental projects in their community. This inspired at least a few Kommetjie residents to get involved. The articles I wrote will hopefully increase awareness and appreciation of the areas where we worked, the issues we were tackling and the organizations I worked with.

...for me



This was an excellent opportunity for me to carry out a number of hands-on coastal restoration projects in a multicultural setting. My idea of heaven, basically. I learned at least as much as I contributed, and I now have the confidence to run similar projects in the future. I learned how to manage a team of workers in an environment of mutual respect and in a way that would maintain their motivation for the work. This gave me valuable experience and confidence in a management role that I will be able to apply to many future situations.

Sustainability

This project is easily replicable. Because it built on existing initiatives, similar work is expected to continue in the future. Furthermore, because I purchased basic tools that the local organization did not previously own, its capacity to perform similar work in the future as a paid service is significantly enhanced. The people we hired have a connection to the organization, and the organization itself has strong connections to local communities. Therefore, with additional funding our project activities can easily be replicated either with the same workers or with others.

Those who were involved in this project have gained enough experience that they can train other people to do similar activities. We hope that because we taught them about the context of this project, as well as other environmental issues and skills such as gardening, that they will take that knowledge back with them to their homes and communities. This experience, along with the training and career planning we offered them, and the connections we gave them to other individuals and training institutes, should also be helpful to them in finding future work. I am eager to maintain contact with KEAG and WESSA, and they expressed interest in continuing to work with me in the future, if funds can be obtained to enable continued cooperation.

The main focus of KEAG, my primary partner organization, is sustainable resource management in its truest sense. That is, it focuses on the connection between human and ecological upliftment by hiring people from underprivileged communities to carry out environmental conservation projects.

Greater awareness of KEAG's approach is needed both with and outside South Africa. The other important lesson from KEAG is that, unlike environmental organizations in Canada, they pride themselves on being a stepping stone for people. That is, they are thrilled when they provide training and skills to individuals who are then able to use that knowledge and those skills to obtain higher-paying and more permanent jobs in other institutions. I think Canada and other western countries have a lot to learn from KEAG's example.

Financial Report

I provide a detailed breakdown of budgeted and actual expenditures in Table 1 at the end of this report. Because the funds arrived later than expected and in two separate portions, it was a challenge to get started and to work with the fluctuating exchange rate. I calculated the conversion to Canadian dollars on a day-by-day basis (which is why you will not see a consistent exchange rate in Table 1). I have kept a record of exchange rates and original receipts if you need to see them.

The following changes were necessary:

Labour: I left extra funds (i.e. savings from my own costs and other items– see below) with KEAG to hire the team for a few more days for project follow-up.

Materials: This amount was slightly higher because I decided to purchase a larger tree popper than we had budgeted for, to pull out alien plants. This tool has been left with KEAG, and will be more versatile for their future use than the smaller version. KEAG can use it as a continued source of employment and income generation. Based on a recommendation by local community members, I paid for half the cost of printed signs that KEAG will put up at its environmental project sites in order to create awareness of its activities. We also spent additional money on plants, in order to replant the unforeseen "Highway" (see "Planting indigenous vegetation" section above).

Transport: We had underbudgeted for transport, as a vehicle was usually required to transport people and tools from the KEAG office to the project sites. Transport of cut branches from the alien clearing site to the dune stabilization site was an unforeseen expense.

Food for workers: We spent less than budgeted, but this amount was also merged into the additional funds spent to pay the workers.

Training: We spent less than budgeted because most of the on-the-job training and environmental education was done by myself or KEAG or WESSA staff.

Community Liaison: We spent less than budgeted because a liaison/interpreter was not required every day.

Applicant's Costs: I kept my personal costs lower than budgeted to enable extra spending in other areas.

Administration: The actual amount in Canadian dollars is slightly different from the budgeted amount because of a change in the exchange rate.

Lessons Learned and Recommendations

...to other Trust recipients

- Having a strong contact in the destination country who is easy to get along with, active on the ground and well-connected to local communities is vitally important. As an outsider, I could not have developed those connections so efficiently if I had had to do so alone.
- With a relatively small amount of funds, it was important that my project built on existing initiatives rather than trying to start completely from scratch.
- It helps to start small, with achievable results, and leave room for expansion.

- Leave enough time at the beginning of the project for personal orientation.
- Seek local knowledge and listen to different people's perspectives, in addition to making personal observations.
- Keep all receipts, keep track of expenses without receipts, and update the budget (i.e. actual expenditures) on a regular basis (e.g. monthly) to avoid surprises.
- Remain flexible and open-minded, and expect the unexpected! Breathe...

...to the Robin Rigby Trust

From my experience both as a funder and as a recipient of various grants, and my experience with this process, I can make the following recommendations to the Robin Rigby Trust for future awards:

- Develop in advance a clear and achievable timeline for funds disbursement and a straightforward framework for narrative and financial reporting (format, length, level of detail), and outline these in the contract/acceptance letter to the awardees. Stick to this timeline (which may need to be set specifically for each awardee if their projects are not simultaneous), with particular care to ensure that a significant portion of the funds is sent prior to the project start date. The awardees should know how much money they will receive and when, and receive the funds on the expected dates. This will result in less pressure and uncertainty for the awardees, and allow project activities to begin promptly. Ideally, the awardees should not have to pay for project costs out of their own pockets.
- Given the time pressures on the Trust committee members, who have other responsibilities, designate and empower a dedicated Trust Fund Administrator. This administrator should have knowledge of the selection, administrative, financing and reporting process and be able to respond promptly (i.e. within a couple of days) and knowledgeably to questions from awardees.
- \$9000 was quite a small amount to work with. We did achieve a lot with it, but it required financial and time limitations. In particular, although the applicant's costs were covered, funds were insufficient to allow the applicant to earn a salary, which limited the duration of the project.

I would be happy to be a consultant to the Trust on these and other matters.

Table 1. Actual versus budgeted expenditures in South African rand (ZAR) and Canadian dollars (CAD)

Item	Actual (ZAR)	Budgeted (ZAR)	Actual (CAD)	Budgeted (CAD)
<i>Labour</i>				
Masizame Alien Clearing - supervisor	1000.00		\$122.64	
Masizame Alien Clearing - workers	1530.00		\$187.64	
Alien clearing and pathway creation - 1 supervisor 9 March to 9 April	1875.00		\$232.58	
Alien clearing and pathway creation - 3 workers 9 March to 9 April	4615.00		\$572.45	
Dune stabilization – 1 supervisor 14-17 April	400.00		\$49.62	
Dune stabilization – 7-11 workers 14-17 April	1560.00		\$193.50	
Indigenous planting – 1 supervisor 20-24 April	1400.00		\$173.65	
Indigenous planting – 3 workers 20-24 April	3975.00		\$493.05	
Additional funds for wages left with KEAG for project follow-up	3044.00		\$431.16	
Subtotal Labour	R 19399.00	R 15000.00	\$2,456.29	\$1,956.00
<i>Materials</i>				
Masizame materials	1457.40		\$178.73	
Tools: tree popper, gloves, hoes	1419.14		\$174.16	
Signs - KEAG environmental restoration project	314.00		\$38.95	
Plants, compost, bonemeal	2160.00		\$301.13	
Subtotal Materials	R 5350.54	R 4225.00	\$692.97	\$550.94
<i>Transport (workers and materials)</i>				
Masizame Alien Clearing	360.00		\$44.15	
Tree popper delivery	60.00		\$7.36	
Transport of branches from Skilpadsvlei to Witsands	1200.00		\$165.31	
Funds transferred to workers for their daily transport to the office	1458.00		180.61	
KEAG vehicle to transport tools/people to sites = 16km/day x 31days x R4.69/km	2326.24		\$329.50	

Subtotal Transport	R 5404.24	R 2350.00	\$726.93	\$306.44
<i>Food (workers)</i>				
Food purchased for workers	28.60		\$3.52	
Funds given directly to workers	1160.00		\$148.71	
Subtotal Food	R 1188.60	R 1850.00	\$152.23	\$241.24
<i>Training</i>				
Materials	31.96		\$3.92	
Training on career planning	500.00		\$62.02	
Training on fire awareness	500.00		\$70.82	
Subtotal Training	R 1031.96	R 2070.00	\$136.76	\$269.93
<i>Community Liaison</i>				
Judy Gwala @ R80/hour - translation and co-facilitation	880.00		\$119.42	
Daniel Dwashu @ R80/hour - translation and co-facilitation	1079.50		\$147.93	
Subtotal Community Liaison	R 1959.50	R 3900.00	\$267.35	\$508.56
<i>Communication</i>				
Mobile phone: sim card, airtime, battery	759.84		\$99.70	
Subtotal Communication	R 759.84	R 750.00	\$99.70	\$97.80
<i>Contingency</i>				
Masizame Alien Clearing admin charge	434.74		\$53.32	
Subtotal Contingency	R 434.74	R 750.00	\$53.32	\$97.80
<i>Applicant's Costs</i>				
Flight to Cape Town from St. John's, NL	13367.00		\$1,743.05	
Travel medical insurance	1277.91		\$116.64	
Accommodation (room, bedding)	5127.97		\$671.07	
Food	3740.79		\$512.66	
Local transport	679.20		\$86.36	
Electrical adaptor	69.95		\$8.97	

Photo finishing (photos given to workers)	509.83		\$71.59	
Subtotal Applicant's Costs	R 24262.82	R 29117.00	\$3,138.75	\$3,796.86
Administration				
WESSA	1500.00		\$212.46	
KEAG	7500.00		\$1,062.32	
Subtotal Administration	R 9000.00	R 9000.00	\$1,274.79	\$1,173.60
TOTAL PROJECT	R 68791.24	R 69012.00	\$8,999.08	\$8,999.17

