

Report for the period 10 October – 29 November 2011



Figure 1: *Ixia dubia*, Photo by: S Marks 2011

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Changing Lives Through Nature

Staff

During this period the staff consisted of a Site Manager, People and Conservation Officer, two Field Rangers and three students. The students completed their final practical training projects at the end of October. KRCA will be getting five contract labourers through the Kadar Asmal Project for the next three years. This project is aimed at the conservation of rivers and wetlands.

Invasive Alien Species (IAS) Management

Management block 4C

Many invasive alien flora species seed banks are stimulated to germinate by fire, and with rapid growth in spring, have the ability to out compete indigenous flora species. The focus for this period has been specifically on initial post-fire alien clearing in this management block. The post-fire period is an ideal time to clear invasives while they are still seedlings, requiring less time and energy. Seedlings can be hand pulled, which minimizes the adverse effects herbicides might have on indigenous flora. All invasives were identified and clearing was prioritised according to species and densities. Table 1 gives a breakdown of the species cleared thus far.

Table 1: Invasive alien clearing in Management block 4C

Species	Description	Density	Method	No. cleared	No. staff	No. days	No. people days
<i>Acacia saligna</i> (Port Jackson)	Seedlings between 10cm – 30cm in height	30 %	Hand pulling, bagging and composting at the Wynberg municipal dump.	Total of 30 black bags	3	4	12
<i>Vicia sativa</i> (Purple vetch)	Seedlings and saplings	20%	Hand pulling, bagging and composting at the Wynberg municipal dump.	Total of 17 black bags	4	2	8

Other management blocks

Follow up clearing has been done in all the other management blocks, according to the Annual Plan of Operations (APO). The following IAS has been cleared:

1. *Sesbania punicea*
2. *Populus*
3. *Acacia saligna*
4. *Vicia sativa*
5. *Sagittaria platyphylla*

The conservation staff will continue to do follow up clearing of all the woody inasives. Grasses have invaded quite far into the older aged vegetation blocks. Control of these grass species would be initially through ecological burning, with intensive follow up action. This needs to be carefully planned to ensure positive results.

Nursery Management and Plant Propagation

A full nursery inspection was conducted at the beginning of November before any propagation was undertaken. Mr James Raad, Envirowatch Solutions, came for a site visit to explain the nursery set up and functioning of the automated irrigation timer. After some minor repairs and maintenance the nursery is now fully functional again and propagation has begun.

Currently plants are not being propagated for rehabilitation but instead for the landscaping of Greenford Estate, Phase 2. The manager undertook the task of cross referencing the KRCA species list with the proposed plant list in the landscaping plan and made alternative suggestions where applicable. This has been done to ensure that the correct genetics of each species are used for the landscaping.

Table 2 gives a breakdown of plant species that have been propagated in the nursery since October.

Table2: Propagation records

Species	Number propagated
<i>Carpobrotus edulis</i>	225
<i>Metalasia muricata</i>	400
<i>Pelargonium capitatum</i>	200
<i>Leucodendron levisanus</i>	200

Future of the Nursery

KRCA management would like to test the possibility of propagating and selling indigenous plants to the public. The current budget from Gold Circle only covers propagation of plants that will be used specifically for rehabilitation within the reserve boundaries or adjacent properties. A business proposal will be drawn up and presented in 2012. Only propagation of rare and endangered plants and plants for Greenford Estate, Phase 2 will continue until the business plan and a comprehensive rehabilitation plan for the remainder of the conservation area have been finalised.

KRCA management would like to conduct some market research and a pilot project, selling plants, at a display at the J&B Met 2012, which has been discussed with Chattels, the J&B Met organisers. These plants will be obtained from the area that is to be excavated and rehabilitated during the Greenford Estate, Phase 2 development.

Seed Collection

Most of the annuals and many of the perennial plant species found in KRCA have begun to set seed. It is important to collect and store seeds for use in future rehabilitation and landscaping projects. This also ensures that there are seeds available should there be an unforeseen ecological disaster. Ideally any future rehabilitation projects should consider using seeds instead of propagated plants, as only plant species that are tolerant to the sites certain ecological conditions will germinate, giving you a true representation of the vegetation type of the area. Seeds have been collected during other work activities and according to the APO. Seeds have been collected from the following species:

1. *Elegia tectorum*
2. *Pelargonium capitatum*
3. *Wachendorfia spp.*
4. *Zantedeschia aethiopica*
5. *Passerina vulgaris*
6. *Erica spp.*
7. *Berzelia abrotanoides*

Seed collection will continue for the next three months, as and when different species begin to set seed.

Environmental Education Garden

Management block 4A5 has been identified as an ideal area for an Environmental Education garden. A comprehensive plan has been completed as well as the initial clearing and bordering of the path. Figure 2 shows the long term plan for the path, highlighting important features. The pathway is ready for use, but many of the features will only be added in the next three years (refer to

Development Plan for the Environmental Education Garden in the Kenilworth Racecourse Conservation Area).

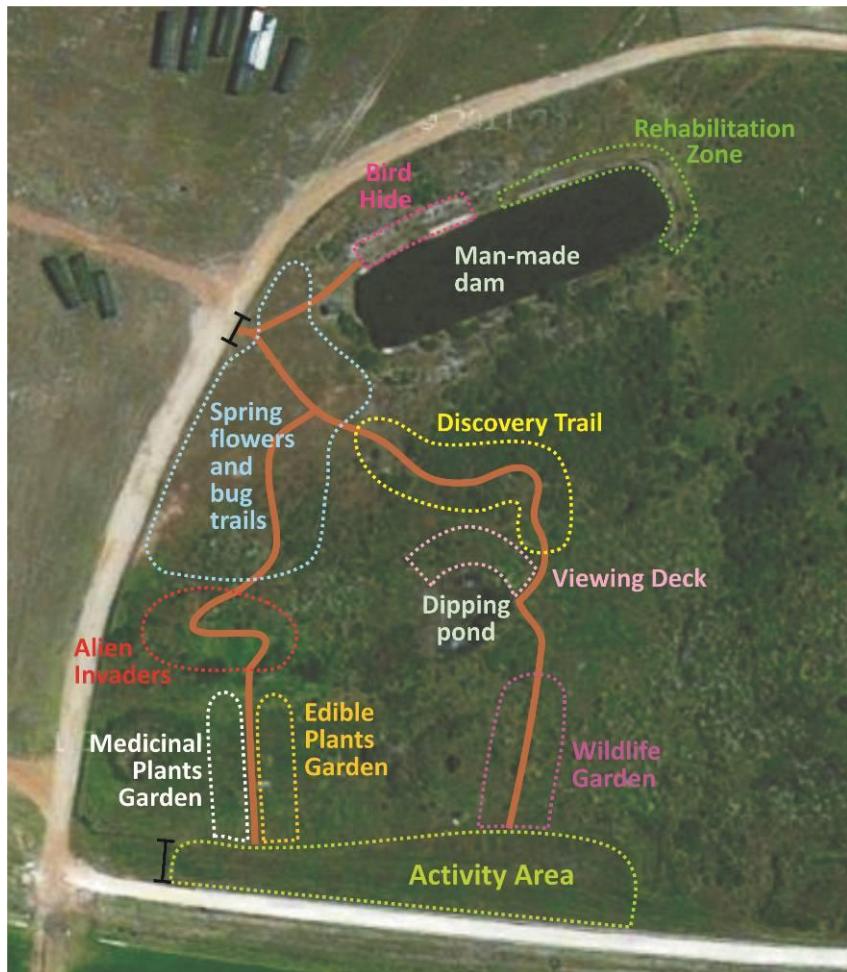


Figure 2: Map showing the proposed layout of the Environmental Education Garden.

At the end of November, KRCA ran their first education programme which used the path, mainly the viewing area at the man-made dam, the Discovery Trail, the Dipping Pond and the Activity Area. Figure 3 shows the learners enjoying a shared writing session in the activity area.



Figure 3: Learners from Constantia Waldorf School doing a shared writing activity

Ecological Burns

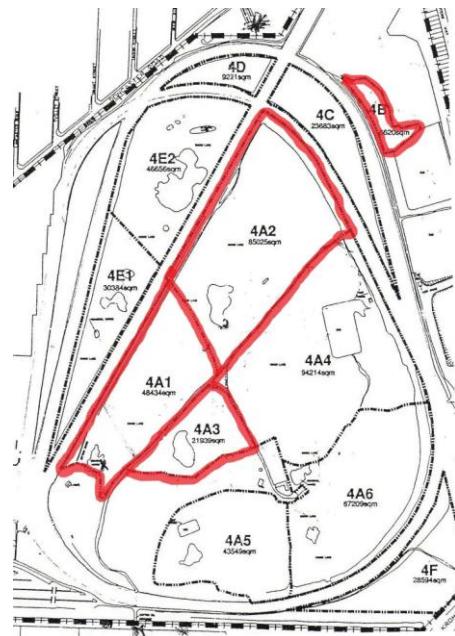


Figure 1: Outlined management blocks for future ecological burns

According to our historical records these management blocks have not burnt for more than 100 years, causing them to become senescent, with uniform stands of *Rhus lucida*, between 2m-4m tall,

dominating management blocks 4A1, 4A2 and 4A3. The priority blocks for burning in 2012 would be 4A1 and 4A3, and 4B.

Management blocks 4A1 and 4A3

This is an ideal time to burn these blocks, largely because the Quarantine Station will not be in operation and burning can take place without any adverse effects. *R. lucida* trees need to be felled to reduce the fuel load before the ecological burn takes place. Some material will be brush piled on top of the *R. lucida* cut stumps to ensure that there is limited regrowth of this species after the fire.

Management block 4B

Management block 4B lies on the boundary of the reserve, adjacent to an area where phase 2 of the Greenfords Estate development will be taking place at the beginning 2012. This would be an ideal opportunity to burn this area before there are restrictions from this new development. The burn will be conducted after the Greenford's site has been cleared of vegetation, creating a fire break between 4B and the development site. A thorough search and rescue operation for fauna and flora will be undertaken before clearing this site. The burn will aid in the control of large Port Jackson (*Acacia saligna*) plants found in this section.

Management block 4A2

KRCA management feel that management block 4A2 should only be burnt in the next five years, helping to create a mosaic of different age vegetation within KRCA and increasing biodiversity. 4A2 is the block where the greatest population of the Micro frog (*Microbatrachella capensis*) is found. Burning could have serious implications for this population and proper planning and research is required before burning can take place.

Resources required for 2012

With limited human resources available at Kenilworth we will request the assistance of the Working on Fire (WOF) team with the initial clearing of *R.lucida*, and the burn on the chosen days. Assistance will also be sought from CapeNature and other City of Cape Town nature reserves. The Plan of Action (POA) will be discussed and confirmed with Mr Dalton Gibbs (South Regional Manager, Biodiversity Management Branch, City of Cape Town), which will include the availability of other City resources (such as skid units and off-road fire trucks) for assistance.

Other Activities

Much of the older vegetation in management block 4A4 has reached a height which blocks the views of the cameras used on race days. After a site inspection it was noted that there are two plant species in particular which are blocking the views, namely *Psoralea pinnata* and *Rhus lucida*. The presence of these species at such heights is due to the area not burning in more than 100 years, and is actually detrimental should the area burn as is. The KRCA staff cut back these areas to improve the visibility and reduce fire fuel load. This will need to be done, when needed, until the area burns,

giving rise to shorter, younger vegetation. KRCA staff cleared all the pathways leading to the camera towers.

Statistics for 2011

Presented in the table below are some of the final statistics and figures for other activities done on site.

Table 3: 2011 statistics and figures

Environmental Education	Outreach		Reserve Programmes	
	Learners: 807	Adults: 44	Learners: 596	Adults: 99
Volunteers	Total volunteers:	96	Total hours:	1207