Kromme Workshop Thursday 29th March 2012 Minutes







lovinglands

Programme

SESSION 1

- 14h00 Registration
- 14h30 Workshop opening
- 14h50 Talks introduced
- 15h00 Palmiet Wetlands of the Kromme
- 15h10 Black wattle in the Kromme
- 15h20 Discussion
- 15h30 Economics of the Kromme
- 15h40 Discussion
- 15h50 Leave for field trip
- 16h30 Japie Buckle field trip
- 16h40 Richard Cowling field trip
- 16h50 Return; tea/coffe/juice

SESSION 2

- 17h30 Introduction
- 17h35 Poster introductions
- 17h45 Open session introduction
- 17h55 Marijn talk
- 18h05 Open discussion
- 18h50 End of workshop

SESSION 3

- 19h00 Braai starts
- 19h30 Supper will be served

Facilitator Dieter van den Broeck

Opening

Agenda (short)

- 1. Opening
- 2. Speed dating
- 3. Voice of the land
- 4. Feedback
- 5. Fieldtrip
- 6. Tea
- 7. Dialogue
- 8. Braai

Main objectives of the Workshop

- 1. Get feedback on Alanna Rebelo's work
- 2. Get an understanding of the area
- 3. Dieter van den Broeck's personal objective is to create a workshop where people are relaxed and feel free to share their opinions, ideas, feelings

Rules of the workshop

- Nothing is right, nothing is wrong
- Everybody is an expert and has a voice
- Respect towards each other
- Freedom of language (both English and Afrikaans)
- Your learning, your responsibility
- No phones

Speed dating

Short exercise when the participants were asked to talk with other participants, at first with a person whom they do not know, at second with a person whom they know very well about the followings:

- Name, organization/farm
- * What is your expectation of this workshop?
- * What makes the Kromme special?

Then they were asked to share their expectations on the workshop in some words. The most often mentioned ones were:

- Want to learn more
- Communication
- Work with nature
- Understanding
- Awareness
- Learn something
- Fynbos
- To know more on how the area has been changed over time and the impacts of restoration

- Knowledge
- Make money

Voice of the land

Presentations by Alanna Rebelo (Msc. student from the Stellenbosch University)

First presentation: Palmiet wetlands in the Kromme - Are palmiet wetlands important?

The main points of the presentation were:

- Introduction of the concept of "Ecosystem services: the benefits that ecosystems provide for humans"
- Changes in land use in the Kromme based on aerial photographs (1954, 1969, 1983, 2007)
- Changes in river flow over time in relation with the changed land use
- Impacts of restoration on water quality
- Differences between functioning palmiet wetlands and damaged wetlands to provide ecosystem services (water supply, river flow, water yield, water quality, flood damage, biodiversity

Second presentation: What damage black wattle cause?

The main points of the presentation:

- The impacts of black wattle on river flow
- Biocontrol options
- Two insects that have potential against black wattle; a beetle which attacks the seeds and a fly which attacks the flowers. None of them is introduced in the Eastern Cape yet, but they are already effectively used in the Western Cape

Discussion

- Beetle is sensitive, if they are released into the area in an appropriate time many of them die, therefore they are less effective
- The fly is new in South Africa
- These insects cannot eradicate the trees themselves, but affects the reproduction of the trees. Therefore it is an effective way to control black wattle in longer term together with the work of Working for Water.
- Beefarms can be affected by clearing black wattle, because bees use it for producing honey.
- However, the interest of the whole catchment and the challenges of most farmers and the problems with black wattle invasion should be the main concern.
- There is a fungus which is very effective against black wattle, but it is not allowed to be released in South Africa.
- Question raised about hakea and Port Jackson. Biocontrol is also used against other invasive
 alien plant species such as hakea and Port Jackson. Hakea is controlled quite successfully but
 Port Jackson is less effectively.
- Fire management together with alien biocontrol could be effective way to get rid of invasive alien plants.
- It is important to realize that farmers should work together, since if a farm is not managed appropriately it affects the neighboring farms as well as other farms in the downstream. One

of the problems is that the farmers' association does not work very well, there is no one who could organize the farmers to work together.

Third presentation: Economics of the Kromme

The main points of the presentation:

- Nelson Mandela Bay Municipality's current water supply sources (Loerie, Churchill, Nooitgedagt, Impofu, Linton, Groendal Springs)
- Assessing different options for Port Elizabeth for satisfying its water demand (treated effluent, building desalination plant, Orange River IBT, building a new dam, using groundwater, restoring the Kromme)
- After the restoration of the Kromme (Working for Water) the price of the water would be around R 3.23/m³. However, it means increased price of water compared to the present situation but it is still cheaper than water coming from other water sources.

Discussion

- Restricted water use for Kromme farmers from the river
- Present situation is that farmers in the Kromme buy water from Water Affairs, but Water
 Affairs requires them to improve their farming practices in order to improve water quantity
 and quality.
- The Kromme farmers are water suppliers and as suppliers they have to go to the municipality to "fight for their rights", however, alone is not effective, thus working together is very important.
- There is a Ph D student who is doing her research on opportunities for Payments for Ecosystem Services in the catchments of Kouga dam and Churchill dam. She is engaged with municipalities including Water Affairs.

Fieldtrip

Both fieldtrips took place in the farm called Hudsonvale.

1. Wetland and erosion control structure- Japie Buckle

Japie Buckle is an expert in the area and works for the Working for Wetlands/SANBI. The fieldtrip took place in the farm called Hudsonvale.

Weir build over the head of gully erosion, was a huge hole, could hide 4 double-decker busses in there. Weir stops the head from eroding further. Three weirs were built by the Heights. Weirs are successful in stopping the erosion.

This is a palmiet dominated wetland (Behind the weir)

In the year 2000 they bored with a peatdrill to the bottom and the peat was 5meters thick beneath the palmiet. Lots of peat. Peat stores 700 I water/m3 and acts as carbon filter.

3,5 million cubic water stored in this wetland. Peat and palmiet acts as a sponge. 0,5-0,7 mm/ha peat accumulates per year. Palmiet/Wetland breaks the speed of the flow of the water. Palmiet catches the sand, silt and grows through it if covered by it.

Question on weirs on the top weirs

Top weir damaged. 2nd structure build to help support against the hydropressure exerted by all the water in the wetland.

Cattle like to eat the young leaves of palmiet. Palmiet must be protected against cattle, and fires. Fire is normal in the area. Fire frequency is considered to be too high if burnt every year.

If you want to burn, burn when it is wet because if you burn when dry you will also burn the peat.

Palmiet does not like black wattle, doesn't like shade

Benefit for farmers - Flood prevention

- Always water in wetland even in droughts

Took three floods to fill the top wetland behind the top weirs, only overflowed at the third flood occurrence

Palmiet uses less water than black wattle, but still uses water. It is an old plant. Has a turnoff switch in drought times and stops using water. Black wattle doesn't have that switch.

Palmiet traps sediment and then just grows higher

Low Water Bridge had to be lifted for farmer because the wetland has lifted the water level and base flow. The water was continually flowing too high over the bridge to cross.

Must start looking at side tributaries of the river they are the livelihood of the river. Tributaries are in very bad condition

2. Fynbos- Dr Richard Cowling

Dr Richard Cowling is a professor from the Nelson Mandela Municipality University, and he is an expert on fynbos.

Fynbos is a funny vegetation. Lots of diversity that is endemic.

- Amount of vegetation for rainfall is very low
 This creates a spare niche for trees, that is why there is such problems with aliens present
 - Aliens have a big impact on fynbos and the runoff
- Weird vegetation. Less water use than other vegetation.
 More runoff than in other parts of the world

Healthy fynbos has lots of proteas (Suikerbos, Baardprotea) in the veld. When look around the veld is not top notch but is still good because the vegetation is intact. Not much proteas. Historically the area would be covered by proteas.

Generally good cover proteas equal good healthy fynbos veld.

Eastern fynbos is different from the western fynbos

- Summer rain
- More grass

Burn the veld to promote production of grasses in 3-4 year rotation, but this is too quick for proteas. Protea cannot survive frequent burning every 3-4 year, because it has only one stem and dies after a burn event and takes up to 4-5 years to produce seeds.

The other problem is the unpredictability of seed production of protea and fynbos, in general. If the protea cannot produce seeds between the fire events, that results in its gradual disappearance from the area. The seed production depends mainly on the climate, particularly on the amount of precipitation. The Kromme River Catchment is characterized by low mean annual precipitation which means that the seed production occurs less often than in places with higher mean annual precipitation. Therefore the optimal burning period would be around 10-15 years to get some proteas back, but might be too long for the farmers.

8-10 years

Rule of thumb for frequency of burning fynbos is too wait for the time it takes a protea to grow from a seed to its first flowering event and three more flowering events before it should be burned. Takes about 5-6 years to flowers and three more seasons puts it to 8-10 year cycle.

Fynbos burns a lot it is necessary for its propagation. Need to manage fire to deal with aliens. Aliens likes fires also, they are adapted to fire.

When should you burn?

There is consensus that burning in autumn is the best time to burn, for recruitment of fynbos after fire, but that is not true to this area. That only works in the Western Cape with the winter rainfall area. Here you can burn whenever you want to. Don't have to burn in the autumn when it is dry. Recruitment of fynbos is not dependent on when you burn but rather on the rain events after burn events. Experiments already done to prove this. Thus you can burn whenever. You can burn in spring when it is cool. Burn in spring if you want to promote grasses.

Question on how area would have looked historically and where proteas would have been?

Everywhere there would be proteas. Protea repens in the plains and lower area. Higher up would be the Baard proteas and the steep slopes would be the Waboom. Waboom still around because it's a resprouter.

Fire cycle every 10 years but it is maybe too long for farming

--Some farmer—Suggested maybe 8 years because the fire is very hot after 10 years with a lot of burning material accumulated. (Pine and black wattle produces a lot of heat when it burns.)

Question if seeps must be protected from fires?

Don't protect it from fires it must be burned, adapted to burn. Just must not burn too frequently. Burn frequency same with the vegetation around it. Burn with it.

The old way of managing fire with rotation burning does not work. More fires started with burning firebreaks. Must respond actively when a fire has stated and decide on the area and its current situation, factors like wind, what is going to burn, where the fire is going, how dangerous it is on what you actually going to do. Stop it or let it be.

Question why he doesn't like pines?

Pines use water and the shade kills the fynbos.

Pines can be killed with two fires. One fire to kill the adults and one to kill the recruitment after the first fire.

Open Session-Dialogue

Introduction of Marijn Zwinkels and the project

Marijn Zwinkels introduced Living Lands and the Kromme project and its main objectives.

Living Lands is a South African non-profit organization which was established for conserving and restoring living landscapes.

Main objectives:

- To find opportunities to help farmers in the Kromme
- To find opportunities to restore the land
- To help reaching that the land provides income for the farmers through a more sustainable way of farming
- To create a process, where stakeholders learn together

During this introduction the Baviaanskloof project was also introduced as a successful example. In the Baviaanskloof the main problem was overgrazing the thicket vegetation that resulted in the degradation of farming lands. It also contributed to erosion and water scarcity problems as well as decreased productivity of farm lands. The farmers' income fell and they had struggles for sustaining their living. In that situation the farmers had three opportunities:

- 1. Planting spekboom (thicket)
- 2. Get the water back
- 3. Earthworks

What does Living Lands offer in the project?- question was addressed to Marijn Zwinkels.

Living Lands aims to do a similar project in the Kromme as it was in Baviaanskloof, in which Living Lands offers to work and find opportunities together in order to improve the situation in the Kromme. To get a better understanding on the challenges that the farmers face with. However, the change depends on the farmers. Students could be also involved in the project by doing research, (e.g. on a farm which has problems with erosion, etc.) and the results of these research could help further the project.

One of the main objectives of Living Lands in the project is to create a process of learning together. After identifying the farmers' main challenges Living Lands can help finding and contacting the right organizations i.e. bringing people and different stakeholders together in order to find solutions for these challenges. "Living Lands is here to listen and help" (Dieter van den Broeck). Living Lands can offer to be the Secretary in the process.

Discussion

During the dialogue the participants were asked for giving their ideas, opinions on what changes should be done in order to create a better future for the Kromme.

The following points were mentioned:

Kromme River Communication Forum /Forum Committee

The need for forming a Kromme forum came up. Such a forum would provide a place where people could talk and communicate with each other, discuss the main objectives and organize further actions.

Japie Buckle who was representing Working for Wetlands/ SANBI also mentioned that a forum like that could contribute to a better cooperation between WfWetlands, WfWater and the land owners, since there is no farmers's association that could represent farmers' interest.

Forming an association will be necessary anyway due to the fact that the Department of Water Affairs and Forestry requires water users to form Water User's Association in each South African catchment (Dieter van den Broeck).

Some farmers even initiated to form a farming community right away during the workshop.

There should be chosen a spokesperson too, who, for instance, could communicate with Working for Water by representing the interests of farmers and mediate the problems. These problems are for instance:

- Alien clearing is not done in a scientific way
- Follows up missing or there is too much time between the clearings
- Communication with Working for Water is lacking

Involve local newspaper

Media could be used for publishing an article about the workshop and the intentions of farmers to improve the situation in the Kromme. Particularly local newspapers should be involved such as 'Die Burger' and the Kouga Express which are widely known and read in the area. Alanna Rebelo already had talked with three well-known newspaper (Weekly Herald) and magazines (e.g. Farmers weekly and Landbou Weekblad) and they were interested to write about this workshop and the outcomes. This could be an effective way to carry farmers' point against the municipality of Port Elizabeth.

However, someone indicated that the article should be formulated in a more careful way, preferable excluding to mention the relationship with Port Elizabeth." We must be careful not waking up sleeping dogs." This research shows how valuable the lands water is for PE. They can just come and take the ground. Don't trust the Nederlanders.

Thus, so suggested to formulate the main focus of the article such as "the Kromme farmers gathered at this workshop to work on their future". It was broadly supported by the participants. Nevertheless, forming an union should not be based on the idea to fight against something, rather work together to reach a goal (e.g. apply for funds together can be more effective) (Dieter van den Broeck). Consequently, such an union should not focus on going to Port Elizabeth and ask money, but farmers should start to work together.

Reduce water use

Since it is not only NMBM who has interest of getting water supply from the Kromme, but also the farmers themselves need water for their living and farming, so it makes it even more important that they work together.

"Learning trip" to the Baviaanskloof

A farmer wanted to know whether the Kromme farmers could meet with the farmers in the Baviaanskloof. Living lands also supported the idea, since such a trip could help the farmers to exchange experience and knowledge with each other. The farmers in the baviaanskloof know how to restore alluvial fans, wetlands and hillslopes which can be a useful knowledge for the Kromme farmers too.

Payments for Ecosystem Services

The concept of Payments for Ecosystem Services came up as a future option. According to the concept service users (downstream) Nelson Mandela Bay Municipality should pay for the Kromme farmers for their adjusted farming activities to sustain water supply to NMBM.

Building dams

Build dams that could release water back into river into the drought times if needed by NMBM

Outcomes of the Workshop

Some of the participants were curious and suspicious at the beginning regarding the origin and funding of the Kromme project since the funding is provided by the Dutch government. One of the farmers even stated that the Kromme farmers should not trust "Nederlanders" because they might just leave after their funding is done. For clarification the representatives of Living Lands explained how the project was born.

The idea of initiating this project came after getting to know Alanna Rebelo's research and talking with Japie Buckle as well as listening to others. All heard information and stories indicated that there are problems in the catchment, thus there is potential for a project which aims to create a living landscape, similarly to project which had been executed in the Baviaanskloof. Therefore Living Lands applied for a Dutch fund which provides funding for the next two years. However, Living Lands being a South African NPO is also supported by the South African government.

 What does the Dutch government want back for funding the Kromme project?-question was addressed by a farmer towards the representatives of Living Lands. The Netherlands wants to help only (Marijn Zwinkels).

After getting answers for their questions, most farmers welcomed the help that comes from Living Lands. A farmer said that he would support who wants to help him, because for him the land is important. He said that he was grateful for getting any knowledge that can help him.

At the end of the workshop the participants were asked about their feelings and most of them said they were positive and looking forward to having changes in the Kromme River catchment.