

Timothy Snyders



Childs Play: Facilitating Child Development Through Play and Interaction with Plants

Contemporary children's playgrounds are places that adults find comfortable, and where they hope their child will not get hurt. According to Esbensen (cited by Fjortoft), this has resulted in playgrounds that do not provide a stimulating environment to assist children in their cognitive and motor skills development. Snda suggests that by exposing children to challenges and obstacles, their decision making abilities further in life will be improved. Additionally, research by Brown has demonstrated that interaction with nature, not just physically but visually as well, can positively contribute to the well being of children. Since contemporary playgrounds tend to lack vegetation, such as trees or shrubs, which could provide the stimulation and obstacles that Esbensen, Fjortoft and Snda recommend, this project explores their use in a children's play environment, located within the hospital complex of the Red Cross War Memorial Children's Hospital.

The brief for this project will be a developmental garden for children between the ages 8-12, using endemic and indigenous vegetation, suitable for the ecology of the proposed biodiversity corridor for Cape Town in which the hospital is located. The garden will facilitate the development of the children's cognitive and fine motor skills through play and the interaction with the vegetation, such as climbing trees and interacting with plants of various textures, uses and sizes. The children's experiences of the garden will assist them with their ability to make decisions by engaging them with a series of obstacles and challenges, facilitated not just by vegetation, but also by manipulated topography that they can climb and which creates diverse vegetation spaces and pockets they can explore.

Change and growth is a key characteristic of plants that will be explored in the design, which will ensure that children have a new experience with every visit to the park. Change will also be explored through plant composition, which will feature the growth patterns and seasonal change of individual plants and their combined effects. In order to explore such change new techniques of representation are used to convey how the plants change and spaces are affected.

Both plants and people change and grow over time and this garden is no exception. The garden and the children will grow up together supplying the children with obstacles and challenges that weren't there before, while younger visitors will experience the newly planted or sprouted vegetation, enabling them to grow with their challenges and obstacles as well as facing the existing ones.

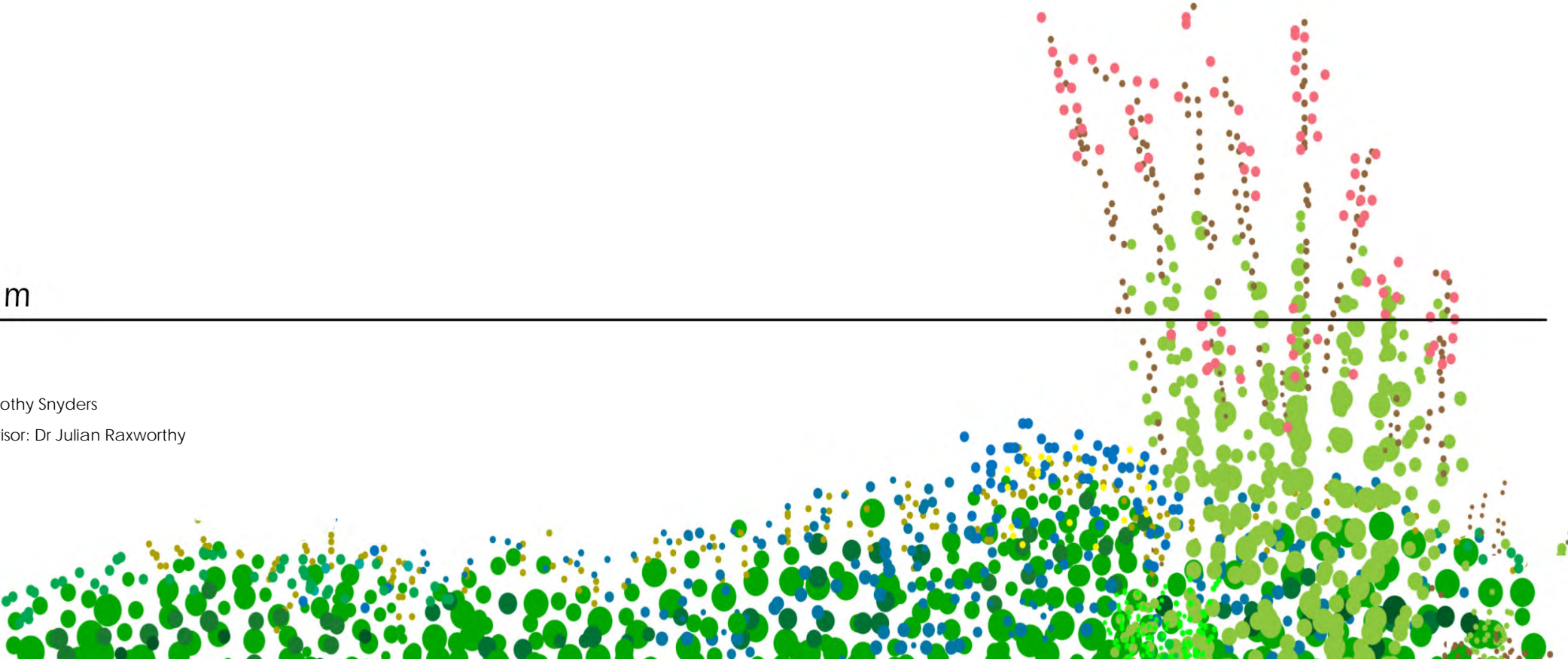
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The Graphic Life of Plants

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The Graphic Life of PLants

Abstract

The representation of planting has been under-theorised in landscape architecture and has become a simple technical accompaniment to design rather than a vital part of the design process. Generally, planting design is left to the end of the project when it fills a previously generated plan geometry as opposed to being used as an opportunity to exploit plants' characteristics and thus assist the initial design process. The conventional representation of a planting plan comprises of circles on a page that depict the plants position and future diameter, but disregards other characteristics, such as growth and seasonal change. This mode of representation prioritises architectural characteristics rather than the visual qualities of the plants. Furthermore, since plants are the only element within a landscape design that changes naturally over time, methods need to be developed that accommodate and exploit this change. To do so, these changes need to be represented for use in the design process.

I will be using the Amazing Cape planting design in the Biodiversity Garden in Green Point Park, to explore alternative graphic methods that could have been used to represent the growth and end result of the planting design and palette. This is in contrast to the more conventional, technical manner of representation.

A graphic review and analysis of the planting design and palette will be undertaken, with the "re-presentation" of a range of different contemporary planting plan representation techniques by leading plant design authors and landscape designers. Evaluating the representation of the future growth and seasonal change in the planting plan and palette. Ultimately producing graphics that best represents the growth and seasonal change of the Amazing Cape planting design.



Figure 1: Morning view of the Biodiversity Garden
Source: T. Snyders

The Graphic Life of Planting

Introduction

In landscape architecture planting plans are a component of working drawings, utilised for construction (Weddle, 1979:149). Notable authors about planting design, Dunnet et.al, Oudolf and Robinson all deal with the planting plans in these terms. This is because the focus of planting plans has been to convey the position of plants for installation rather than the representation of the plants' contribution to the landscape design. However I would argue that because planting plans are generally considered a technical accompaniment to a landscape design, plants themselves are rarely treated as a part of the design. This in turn raises questions about representation.

Representation can be defined as "the process of depicting something in a graphic form" (OED, 2014); the tool used to communicate the designer's intent in a tangible, graphic form that others can understand and visualise. However, it can be said that representation is fundamentally about interpretation and not perception. If a graphic represents something, the user will experience it and create a visual awareness of the object being represented (Wollheim,1998:3,4). Representation is used within the design process, not only for final presentation, or documentation drawings but also to develop the design.

If planting plans are currently being represented as a technical accompaniment, then what alternative forms of representation can be used to incorporate plants into the design process, instead of being used to fill form? With representation meaning the depiction of something, in this instance the "something" in this study is plants. Therefore, changing the way in which plants are represented, and/or depicted, has the potential to initiate the development of an innovative planting design (Raxworthy, 2013).

To assist in the design development, a plant palette is needed in order to understand the material, plants, one is working with. This process of plant selection is where one can gain an understanding of the character of one's planting design, the palette is the link between the planting theme (or character) and the plants themselves (Robinson, 2004:180,181).

For example, the Amazing Cape planting design focused on the plant combinations; as such, an extensive knowledge of the plants' characteristics, such as growth and seasonal change, was required. Robinson recommends that a visual and spatial depiction assists in developing this understanding. This visual depiction will develop through the detailed planting plan, which should include the characteristics (i.e. growth and seasonal change) of the plants themselves (Robinson, 2004:180,184).

Plants are the one element within the design that is guaranteed to change. This is most obvious in the growth of the plant and in the seasonal change, may it be foliage or flower colour. This change in the plants' characteristics is what I find lacking in the current, technical methods of plant plan representation, used by the authors previously mentioned. This relationship between plant design and change creates a dynamic relationship within the design (Raxworthy, 2013).

In this study I consulted a range of literature on planting design and works by other landscape designers that deal with plants, particularly the plant plan and palette. Each has its own strengths and weaknesses which I review in the body of the study, but I will briefly outline and critique the selected authors below.

The term planting plan is used differently and often inconsistently by various authors. Dunnet et al specifically state that they will be talking about "technical planting plans". However, within the rest of their text the term planting plan is misused, using it interchangeably with the concept of a technical planting plan (a plan indicating the positioning and the overall size of the plants); neglecting to represent the characteristics of the plants such as the growth and seasonal change (Dunnet et al, 2004:245,249). This use of a technical planting plan is also seen in Weddle's section concerned with construction drawings (Weddle, 1979:149), as well as in Oudolf's work, where he too indicates the positioning and final size of the plants being used in a technical manner. He does indicate colour and texture within the design but the colour is mainly used for identification purposes and not seasonal representation. However, the seasonal change is represented in a table format adjacent to the plan but this is more of a technical representation. He too fails to represent the change of plant growth (Kingsbury & Oudolf, 2013:104,105). A second apparent misconception comes with Robinson as the first to mention a "detailed planting plan" in which the consideration of the plant choice takes place, regarding the plant palette (growth, seasonal change). However this is depicted in the conventional technical manner of plant plans where one is unable to clearly understand the characteristics to be shown in the detailed plan of which he speaks (Robinson, 2004:180-189).

Finally, growth and seasonal change were two elements lacking in the forms of representations by Dunnet et al, Weddle, Oudolf and Robinson. Rose, however, illustrates the growth of plants of various forms and combinations in a timeline but in a more technical manner. The representation used by Vogt Landscape Architects for planting, I find is more in keeping with the definition of representation. The techniques used depict the seasonal change and growth of plants graphically rather than in a technical fashion with the use of coloured dots and circles depicting plant growth and change, not only in plan and section but highlighting the layering of plants within the design, representing the two key elements concerned in this study: growth and seasonal change (Vogt Landscape Architects Ltd, 2006:123-167).

It is in light of all this that I have selected a portion within the Biodiversity Showcase Garden, Green Point Park, entitled Amazing Cape, which was designed by Marijke Honig. In this study the plan has been redrawn by me, under the supervision of Honig, illustrating a combination of existing plants and the plants that were part of the initial design, as the original plan could not be found.

Methodology

This study will review a series of authors (Dunnet et.al, Oudolf , Weddle, Robinson, Rose and Vogt), and evaluate their forms of representing planting plans, and selected planting palettes from their books which I felt best represented their approach to planting plans. These planting palettes and plans include the conventional, more technical method and the more contemporary depictions. It

is hoped that in so doing this paper will be able to influence the approach taken and conceptualisation of planting plans in the future

From Dunnet et al, Oudolf and Weddle, I selected plans that reflect their description of planting plans, ones that are more conventional and technical in nature, and I analyse Robinson's description of what a "detailed planting plan" must contain. From Vogt I selected plans representing planting themes and accompanying seasonal tables, with the addition of sections depicting seasonal change and growth as well as a series of plans representing the seasonal change of the plant palette. I use Rose's representation of plants growth over time, which he depicts with a series of drawings representing the growth and type of plant. The analysis of a timeline representing the seasonal change of plants by Florida International University's (FIU), School of Architecture has also been applied to the Amazing Cape plan.

I then applied these forms of representation to a selected portion of the Amazing Cape planting design in the Biodiversity Showcase Garden, re-representing some techniques directly while others have been altered based on my interpretation and analysis of those forms of representation. This use of the same portion of planting plan allowed me to formulate both strengths and Weaknesses for each of the planting plans, based on the re-representation of them. In doing a comparative analysis between them, I feel that I was able to deduce the characteristics lacking in each of their forms of representation and thus make recommendations towards a more holistic conceptualisation of a planting plan.

Conclusion

The characteristics in the representation techniques I found to be lacking from the case studies were growth and seasonal change. However, these were found within Rose's and Vogt's methods of representation. Taking Rose's depiction of growth and Vogt's depiction of plants colour and seasonal change, I have formulated plans and sections depicting what I feel to be the best way of representing the change of growth and seasonal colour within the Amazing Cape planting design.

Traditional Planting Plans

Theorised Planting plan

Below are examples of planting plans extracted from Dunnet & Hitchmough (2004), Weddle (1979) and Oudolf (2013), figures 2-4 respectively. These indicate the traditional but more technical representation of planting plans utilising geometry, hatching and colours to indicate the plants positioning and ideal size.



Figure 2: Planting plan (Dunnet et al)
Source: Dunnet, N & Hitchmough, 2004:249

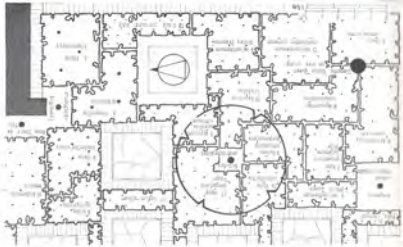


Figure 3: Planting plan (Weddle)
Source: Weddle, 1979:151

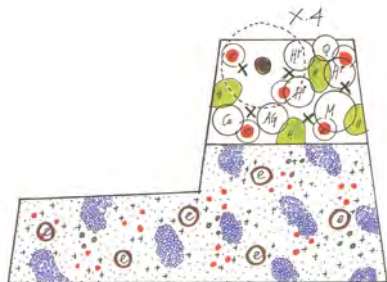


Figure 4: Planting plan (Oudolf)
Source: Kingsbury & Oudolf, 2013:95

Amazing Cape Planting plan

The adjacent plan is the representation method used by Honig for the Amazing Cape Planting Plan (figure 6) (drawn by T. Snyders), and is also the more traditional and technical manner of representing a planting plan. However it does represent the texture and colour of the plants foliage and/ or flowers. Figure 5 is the portion of the plan that I will be applying the various techniques of representation by the selected authors on planting design.

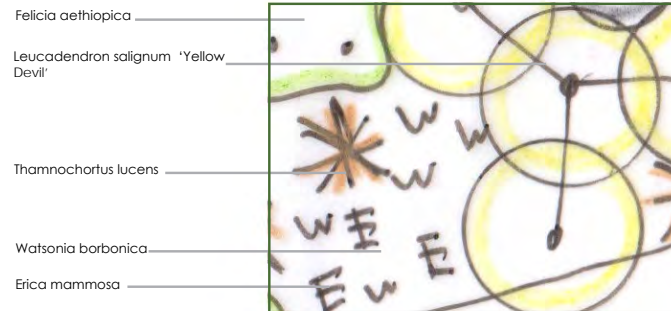


Figure 5: Selected area for representation study
Source: Designed by Marijke Honig, Drawn by T. Snyders

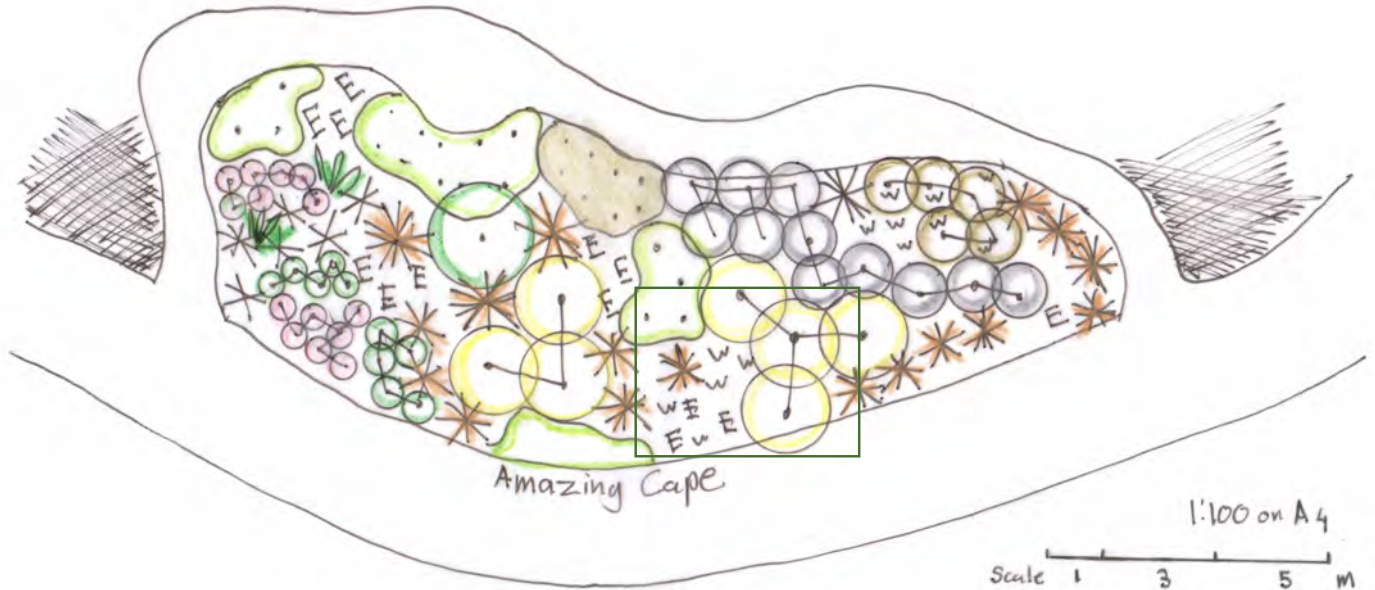


Figure 6: Planting plan of Amazing Cape
Source: Designed by M. Honig, drawn by T. Snyders

Strengths

- Plants used within the design are clearly indicated
- Using colours and textures, like Honig does, to represent the actual plant colour and texture (unlike Oudolf) assists in representing the character of the planting.
- By knowing the exact name of the plants, one is able to visualise the plant combinations.

Weaknesses

- A technical manner of representing a graphic plan
- Plans represent a clinical combination and dimension of the plants and do not allow for the representation of the plants future growth or seasonal change.

Seasonal Change

Planting Plan & Seasonal Colour Table

This is a plan (figure 7) representing a colour band within the planting design of Vogt Landscape Architects (yellow-green with white accents) and the position of the accent plants, main perennials, ground cover, bedding plants, bulbs and infill plants (Vogt Landscape Architects Ltd, 2006: 113). They used colour to depict the plants foliage and /or flower colour along with the representation of layers using smaller circles (Vogt Landscape Architects Ltd, 2006: 113).

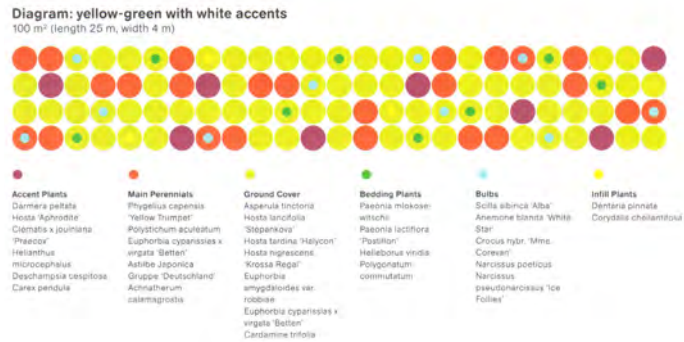


Figure 7: Yellow-Green with white accents Plant plan
Source: Vogt Landscape Architects Ltd, 2006: 113

The table below represent the seasonal flowering times and colours of the plants used within the yellow-green and white accent bed. (Vogt Landscape Architects Ltd, 2006: 113)

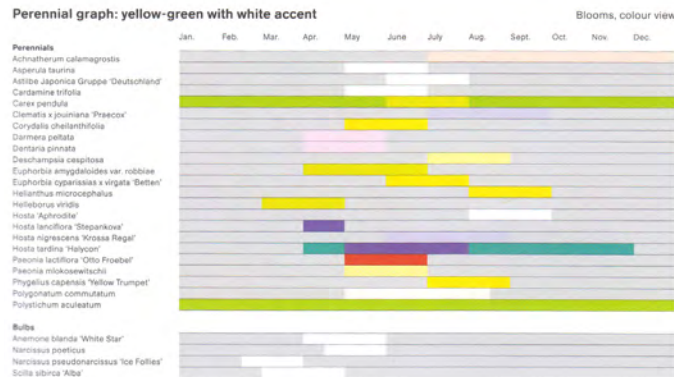


Figure 8: Table Yellow-Green with white accents
Source: Vogt Landscape Architects Ltd, 2006: 113

Amazing Cape abstract Planting plan

Figures 9 & 10 represent Vogt's method of a planting plan and table format of the seasonal change, applied to the portion of Amazing Cape.

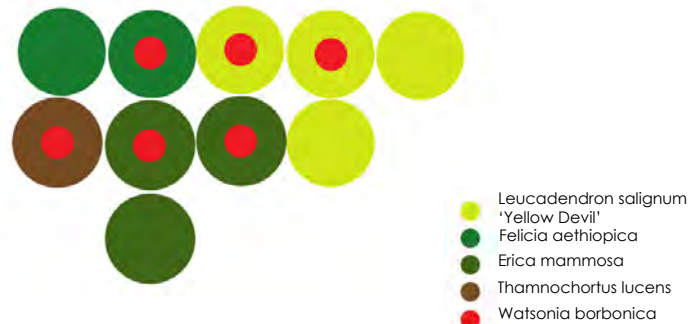


Figure 9: Amazing Cape planting plan
Source: T. Snyders

Perennials
 Erica mammosa
 Felicia aethiopica
 Leucadendron salignum 'Yellow Devil'
 Thamnochortus lucens

Bulbs
 Watsonia borbonica

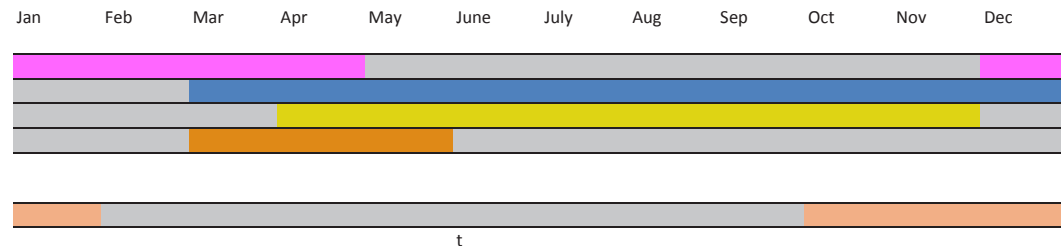


Figure 10: Amazing Cape Seasonal table
Source: T. Snyders

Strengths

- The strong contrast between the colours, allow for clear understanding of plant combinations.
- The technique of using smaller, different coloured circles to represent the undergrowth of bulbs and ground covers, illustrates the plant layering well.
- Listing the plants with a key makes for easy referencing
- The table gives one a strong overview of the colour one would experience throughout the year and allows one to see at a glance how long the flowering period will be and when you can expect a change in colour

Weaknesses

- With all the plants being represented by the same sized circle, it is difficult to understand the physical characteristics they will bring to the planting design.
- The colours of the circles don't portray the colours of the actual plant which could lead to a misunderstanding of the character of the bed
- The formal and clinical illustration of the plants, does not represent naturalistic planting well
- The table is a very technical and academic manner of representing the seasonal change of plants.

Interpretation of Vogt's Plan and Seasonal Table

Consolidated Representation techniques

I have interpreted the planting plan technique used by Vogt and applied it to the naturalistic planting design of the Amazing Cape plan (figure 11) using his technique of representing the plants with a circle, depicting the plant's most prominent colour and representing the layers of planting with smaller circles. The seasonal table (figure 12) indicates the progressive starting and finishing times of the flowers as well as a chronological arrangement of the colours.

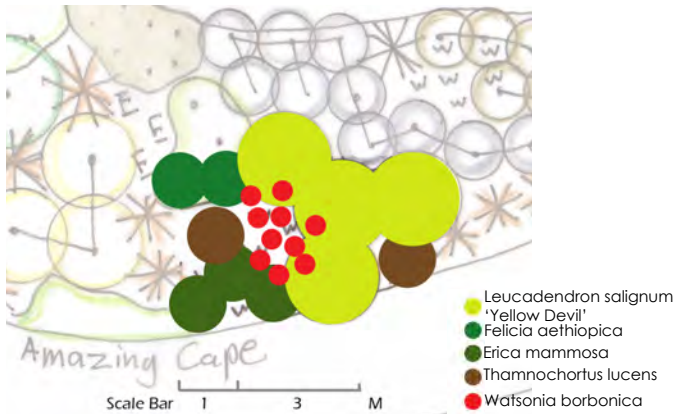


Figure 11: Naturalistic abstract planting plan
Source: T. Snyders

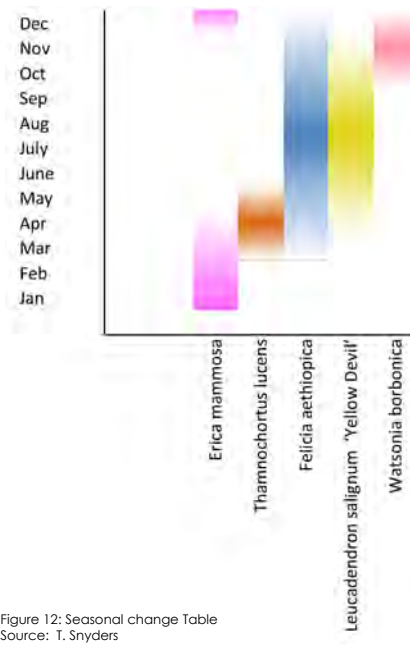


Figure 12: Seasonal change Table
Source: T. Snyders

Strengths

- The unified form given by a number of interlinking circles, portrays the plant massing well allowing one to visualise the colour grouping of the planting design.
- Distinction between the various plants is clear.
- Illustrates the merging of the different plant types into a unified form.
- The integrated smaller circles represent the planting layers well
- The table allows one to quickly and accurately see the flowering colours and times of the plants
- Represents the progressive flowering process from start to finish and illustrates the seasonal change of the whole bed by means of the chronological arrangement.

Weaknesses

- The plan only shows the final "ideal" growth of the plants, and not the intermediate stages
- The table is largely a technical and an academic way of representing seasonal change.

Seasonal Timeline

Seasonal Visual Timeline

This timeline represents the colour and form of the plants throughout the year by depicting the plant with a series of coloured pictures. These colours represent the actual colour of the plant during Summer, Autumn, Winter, Spring. The colour combination of the plant groupings can also be seen within this timeline (Krum, 2008 & Florida International University's, School of Architecture, 2008).

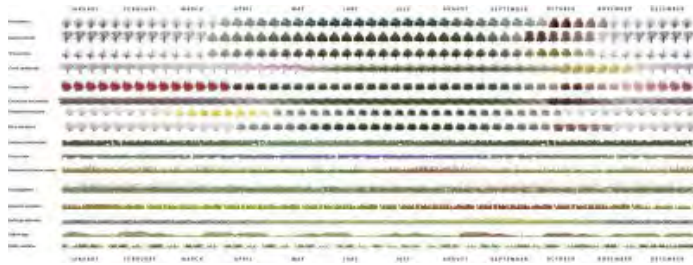


Figure 13: Visual seasonal time line of plants
Source: (Florida International University's, School of Architecture, 2008)

Amazing Cape Seasonal Visual Timeline

Represented in this timeline (figure 14) are the plants of the selected area, Erica mammosa, Thamnochortus lucens, Felicia aethiopica, Leucadendron salignum 'Yellow Devil' and Watsonia borbonica, depicting the flowering times and colours of the plants within the selected portion of the plan.

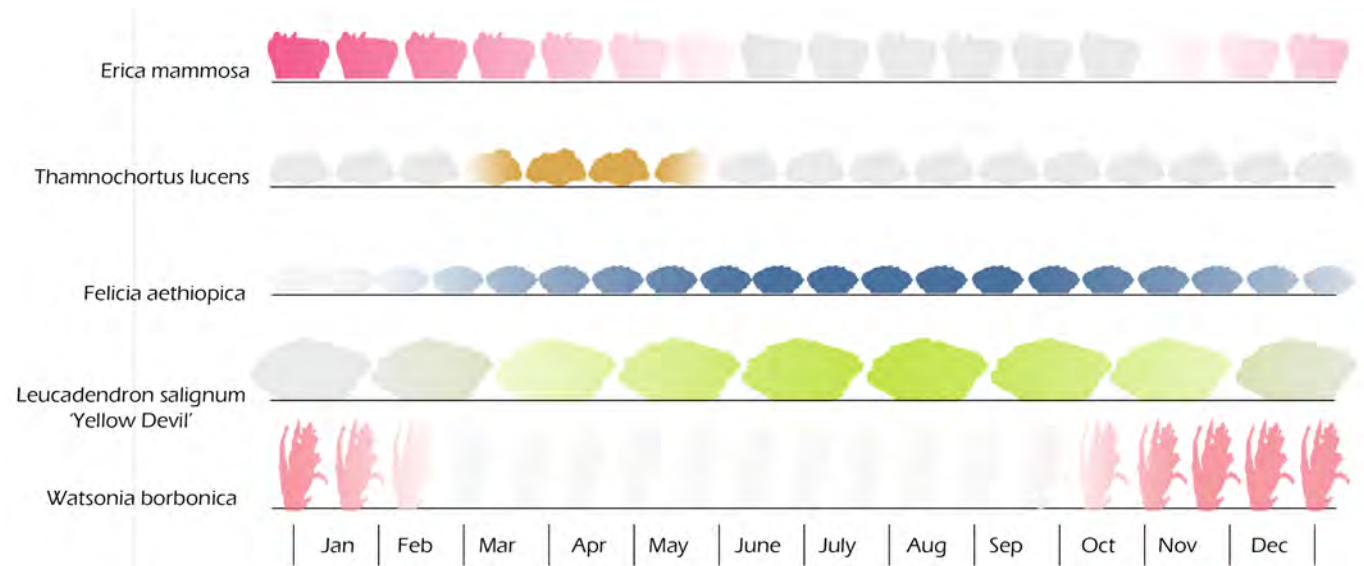


Figure 14: Amazing Cape visual seasonal timeline of plants
Source: T. Snyders

Strengths

- Clear representation of the progressive starting and ending times of the flowers.
- Allows for correlation between the various plants enabling one to visualise the all year round colour of the bed.
- Clear and simple graphic

Weaknesses

- illustrates the seasonal change of the mature planting but still has the potential to show growth and seasonal change of the bed.

Seasonal Plan

Seasonal Planting plan

The Series of plans represent the seasonal change (Spring, Summer, Autumn and Winter) of the trees in a design by Vogt. Depicting the foliage colours of the various species within the plant palette.



Figure 15 Seasonal change of the Justizzentrum
Source: Vogt Landscape Architects Ltd, 2006: 150-151

Amazing Cape Seasonal Planting plan

These plans represent the seasonal change in colour within the selected portion of the design. However they do not just represent the foliage colour but the flower colour too.

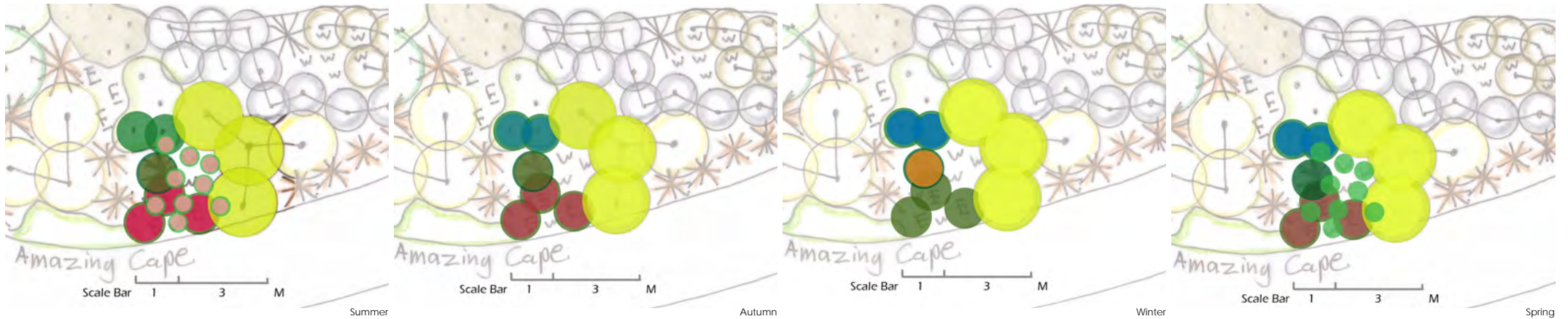


Figure 16: Amazing Cape Seasonal Planting plan
Source: T. Snyders

Strengths

- Accurately conveys the character of the planting with the change of season.
- Clear and legible
- Contextualising of the design assist in understanding of the visual impact of the seasonal change
- The amendments I've made to the Amazing Cape plans , illustrates both the foliage and flower colour representing the characteristics of the plants and their seasonal relationship.

Weaknesses

- Plant identification either through labelling or a key would have added to the understanding of the design.
- An idealistic representation of the seasonal planting.

Seasonal Sections

Representational Section

These sections (figure 17) represent the planting palette in the design and their seasonal change. The colour, density and height of the plants have been depicted with a series of different coloured dots, and the use of a time line depicts the flowering time of the plants (Vogt Landscape Architects Ltd, 2006:129).

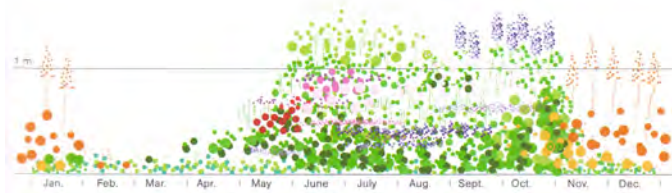


Figure 17: Flowering grove section
Source: Vogt Landscape Architects Ltd, 2006: 129

Amazing Cape Sections

The Following sections are my interpretation of Vogt's sections. Figure 18 represents the seasonal change of two plant types in the Amazing Cape (Felicia aethiopica and Watsonia borbonica). While Figure 19&20 represent a summer and winter section of the selected portion of the Amazing Cape plan. This indicates the height of plants while figure 18 represents the seasonal time line

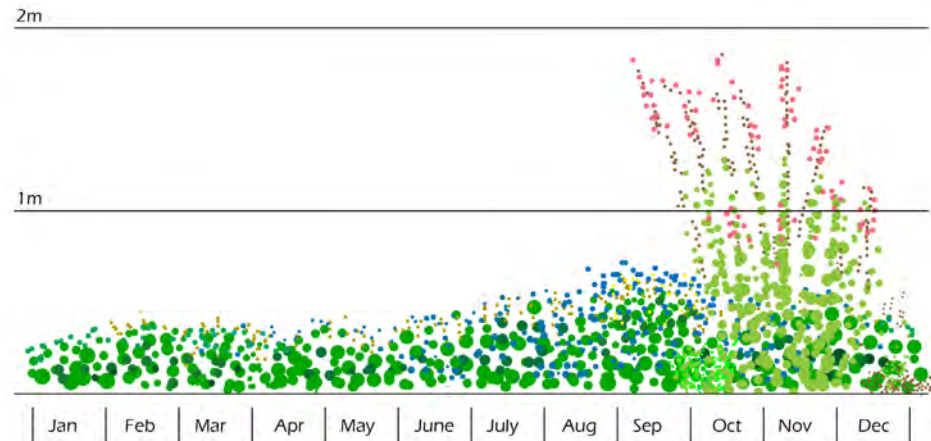


Figure 18: Section of two selected species within the Amazing Cape the the Seasonal chnage of them
Source: T. Snyders

Strengths

- The metre markers allows one to visualise the height variation of the bed
- The use of coloured dots portraying the expected colours and densities of the bed, not only the flowers but the foliage too.
- The year time line gives a good representation of what the bed would look like.
- The sections representing the Summer and Winter illustrates the visual character of the bed.

Weaknesses

- Plant labels would have added to the understanding of the plant growth over the year.

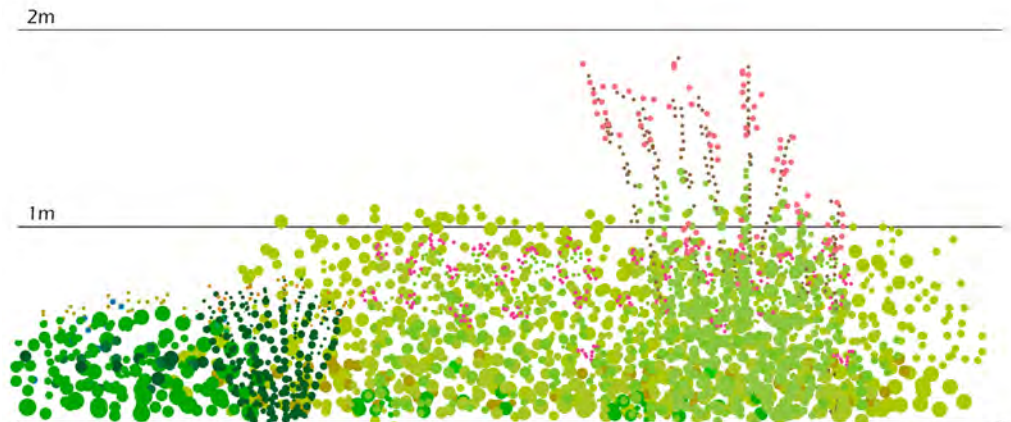


Figure 19: Section representing the Summer flowering of the selected portion of the Amazing Cape Plan
Source: T. Snyders

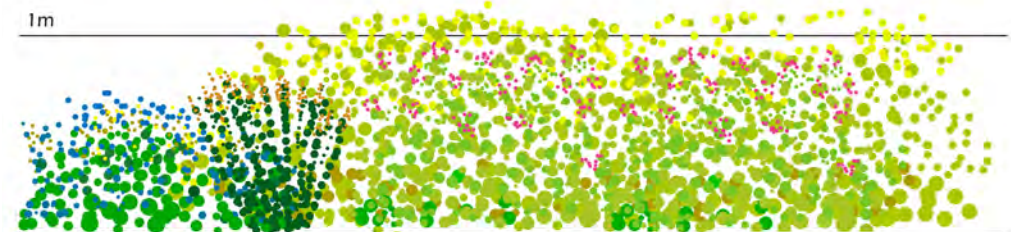


Figure 20: Section representing the Winter flowering of the selected portion of the Amazing Cape Plan
Source: T. Snyders

Plant Growth

Growth Rate

The illustrations in figure 21 depict the growth rate and forms (round, oval or columnar), of various plant types allowing one to get an understanding of progressive growth of the planting (Rose, J,1958: 200).

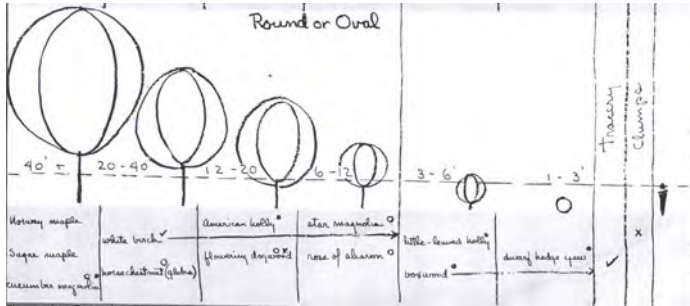


Figure 21: Growth rate
Source: Rose, J,1958: 200,210

Spacing

figure 22 Represents the plant combinations, groupings and their relationship to each other.

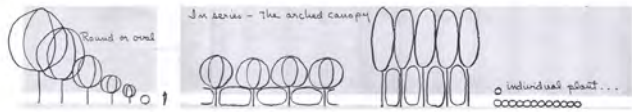


Figure 22: Plant relationships
Source: Rose, J,1958: 200,210

Amazing Cape Growth Rate

Figure 23 & 24 are my interpretation of Rose's representation of growth and plant relationships. They depict the growth of individual plants and planting combinations of the selected portion of the Amazing Cape in a layered manner , one is able to see the growth rate of each plant and how they grow into each other.

Strengths

- One can see the height and space the plant will ultimately fill.
- An example of the plant types have been given below by Rose.
- The relationship between growth and form is understood in these illustrations.
- The overlay of the progressive growth depicts the holistic growth of the plant
- The use of a time line and metre marks allows one to understand the growth form of the plant

Weaknesses

- The representation of the plant combinations' growth rate is misleading as each plant grows at a different rate.

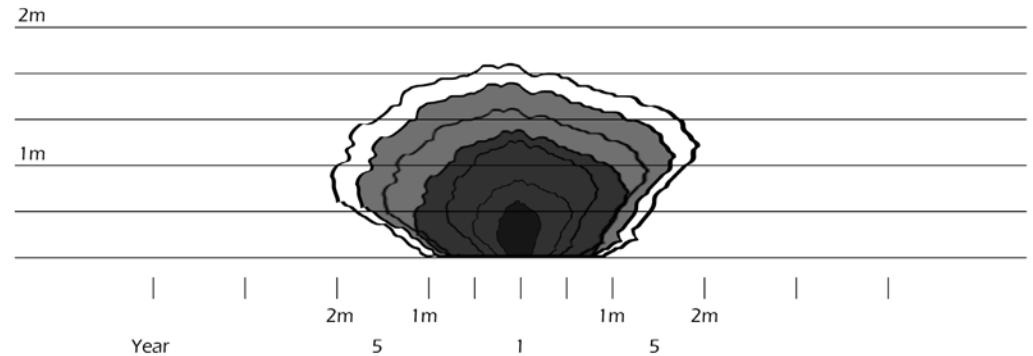


Figure 23: Growth rate and form of *Leucadendron salignum* "Yellow Devil"
Source: T. Snyders

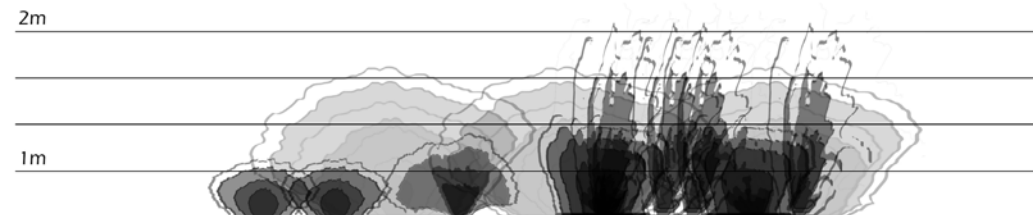


Figure 24: Growth rate of planting combination
Source: T. Snyders

Amazing Cape Growth Rate Plan

Figure 25 represents Rose's depiction of growth with the colour of the foliage in plan form. The circles illustrate the ideal radial growth of plants and the manner in which they would overlap, allowing the visual character of planting combinations to be depicted.

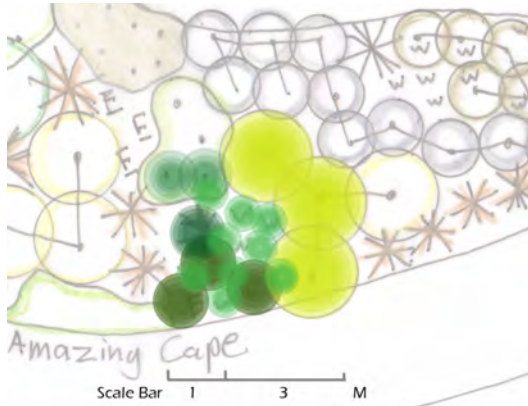


Figure 25: Enlarged view of the selected portion, representing plant growth
Source: T. Snyders

Strengths

- One is able to clearly see the merging of the plants as they get older
- The use of colour indicating the plants foliage, allows an understanding of the visual character
- Representation of the ideal size of the plant and the plant names assists in understanding the growth of each plant

Weaknesses

- The representation of the plant combination growth rate is misleading as each plant grows at a different rate.

Discussion

The use of colour by Oudolf is purely for reference and does not depict the character or seasonal change of the planting. While Vogt does use colour to portray the character of the planting. This can be seen in his plans and table for seasonal change. This is the reason why I feel Vogt's use and representation of colour works best and the method I will use in the representation of the Biodiversity Garden.

Growth is represented by Vogt in his sections; depicting the seasonal change of planting. The use of a time line indicates the progressive transformation of the planting and uses meter markers to scale the section and bring understanding to the amount of growth that takes place throughout the year. Rose illustrates growth in a more diagrammatic, technical manner, in which he illustrates the growth of a single plant in various forms such as, round or oval and columnar. These forms of representation each have their own strengths, with Vogt representing the growth of the plant groupings while Rose depicts the studied growth of a single type of plant. For this reason I have used each individually but altered them to represent my conclusive depiction of their palette based on their strengths and weaknesses. This has been in the form of using Vogt's method to represent seasonal change of summer and winter and altering Rose's technique to depict the growth of plants layered upon each other instead of a linear format as he does. This layering method used in the depiction of the selected portion of the planting plan, allows one to see the progressive growth of plant groupings, and how they grow into each other.

The seasonal change used by Florida International University's (FIU), School of Architecture depicts the seasonal change of plants using an illustrated timeline, which uses the actual plant and represents the seasonal change based on the colour of the plant form. Clearly communicating what the plant and plant combinations adjacent to it will look like. Vogt on the other hand represents it in a technical and scientific manner, by using a table format. For this reason I feel the depiction of the plants by FIU runs in accordance with my definition of representation.

The only seasonal change depiction in plan format (in this study) by Vogt represents the visual characteristics of the planting design in every season of the year. This communication of the visual characteristics of seasonal change is why I feel it is a good method of representation.

Final Plans

Amazing Cape Growth Rate & Seasonal Plan

These planting plans are the combination of Rose's and Vogt's methods of representation, which I have amended to best represent the change in growth and season of the Amazing Cape planting plan. Figure 26 represents the plant combinations and the ideal radial growth of the plant. The colours depict the foliage colour of the plants and the growth is represented by the saturation of the colours as they move away from the core of the plant.

I have taken the representation technique from the plan above and distilled it into a plan representing the plant groupings and total growth (figure 27) depicting the way they grow into each other and not as single plants, using colours in the same method as figure 26. Figures 28 & 29 (pg 16) represent the seasonal change that would take place in the bed in Summer and Winter, conveying the visual characteristics of the bed.

In addition to these plans, I have selected my amended representation techniques which I feel best represent growth and seasonal change in planting plans/palettes used in the main body of analysis. Selecting my representation of Vogt's section in which I have depicted the seasonal change between summer and winter (figures 19 & 20) and selecting the seasonal timeline by FIU (figure 14). With the addition of Rose's depiction on growth used to represent the plant groupings of the selected portion of the Amazing Cape plan that represents how they grow into each other through the use of the layering technique (figure 24).

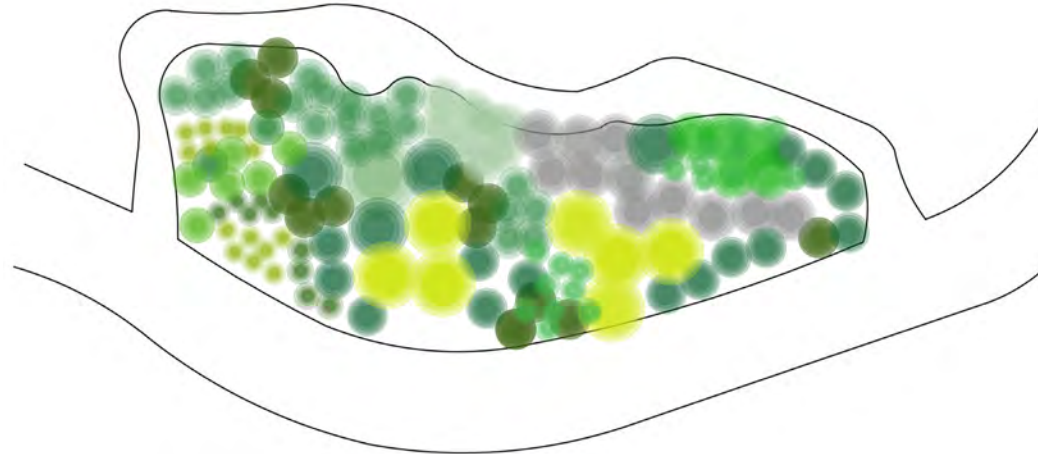


Figure 26: Amazing Cape Radial Growth Plan
Source: T. Snyders

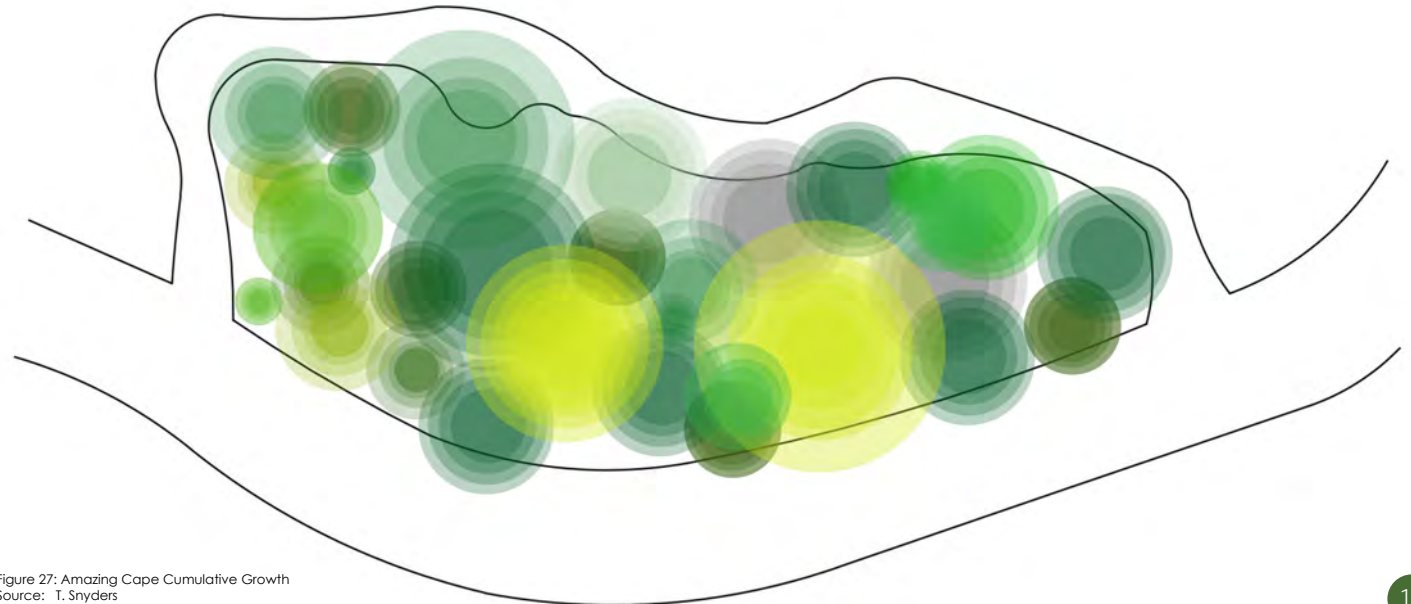


Figure 27: Amazing Cape Cumulative Growth
Source: T. Snyders

Plant Key

- Aloe commixta*
- Watsonia borbonica*
- Aristea major*
- Felicia aethiopica*
- Thamnochortus sp*
- stoebe plumosa*
- Leucadendron saignum 'Yellow Devil'*
- Agathosma serpyllacea*
- Agathosma capensis*
- Erica coccinea*
- Serruria aemula*
- Erica verticillata*
- Indigofera cytisoides*

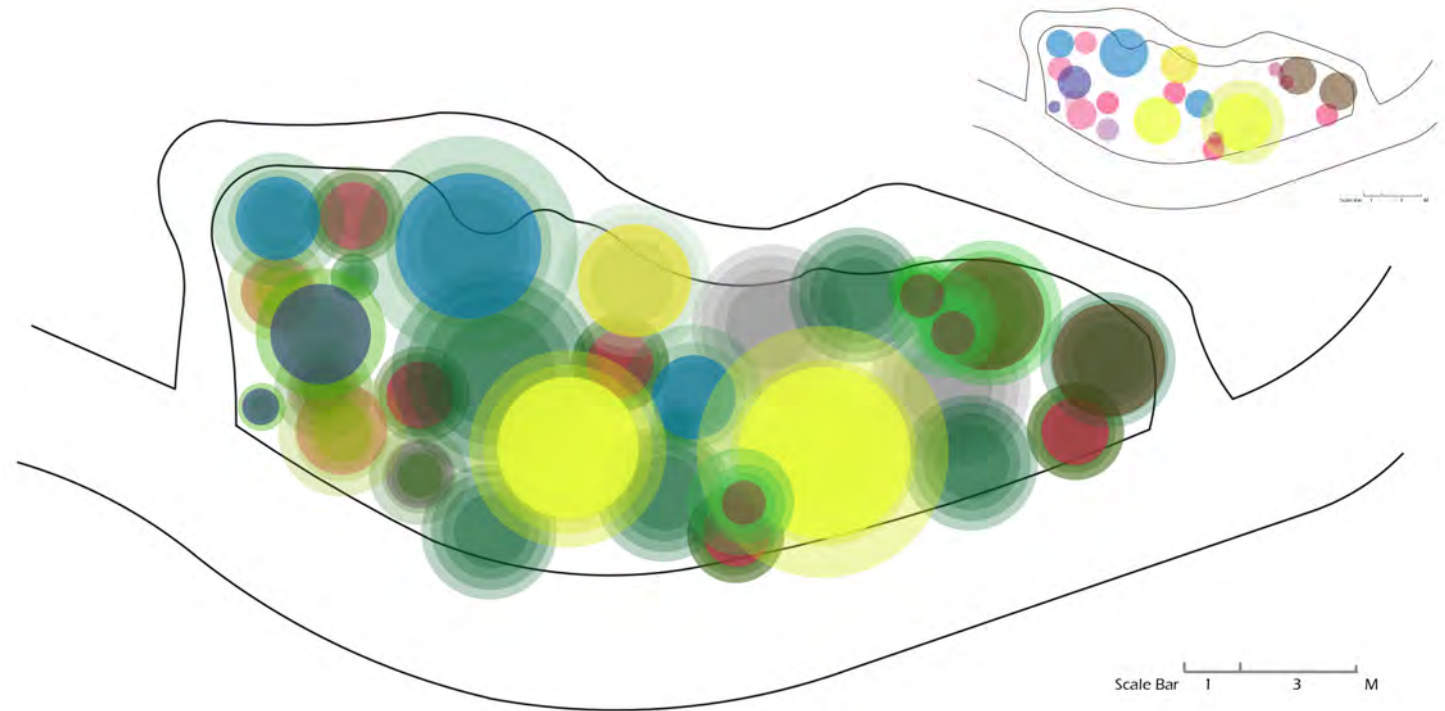


Figure 28: Amazing Cape Summer flowering
Source: T. Snyders

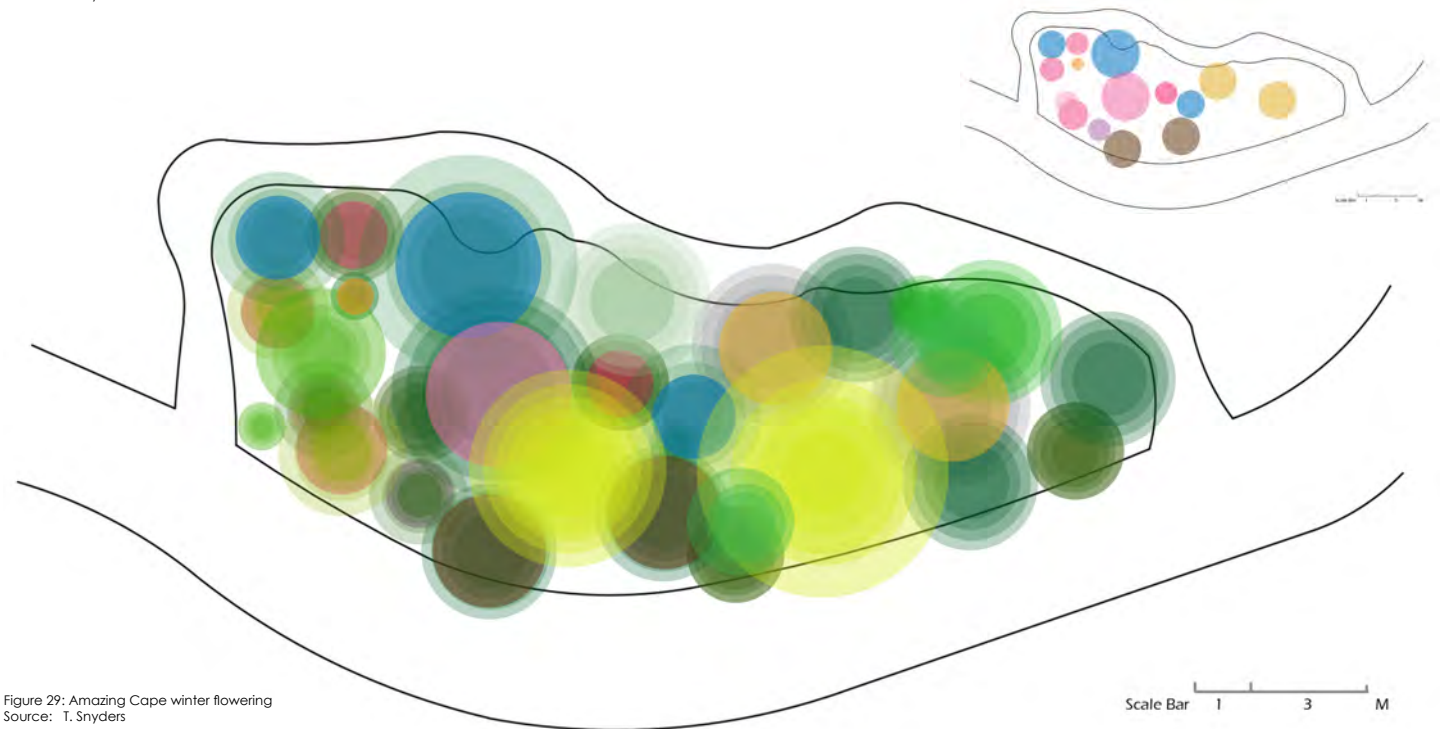


Figure 29: Amazing Cape winter flowering
Source: T. Snyders

Conclusion

This study has sought to prove that there is a lack in the representation of plant growth and change in planting plan and pallets, through identifying both the strengths and weaknesses in the existing methods, I identified. I have taken Vogt's plant plan and Rose's plant growth representation and united them to recreate a representation of the Amazing Cape planting plan. The plan depicts the idealistic radial growth of the plants using varying saturations of their foliage colour radiating from the central point of the plant. Indicating the ideal growth pattern and how the plants grow into each other.

This form of representation has then been distilled to represent the visual character and growth of the plants using a radial graphic representing the various plant groupings and their foliage colour. Depicting the manner in which the plant groupings merge into one through their lifetime. This is accompanied by my amended section of Vogt and Rose's representation technique on seasonal change and growth respectively.

By representing the growth and seasonal change of the Amazing Cape planting, using a collaboration of Vogt and Rose (both plan and section). It confirms that there is a way of representing planting plans and designing through the process of formulating the plant pallet.

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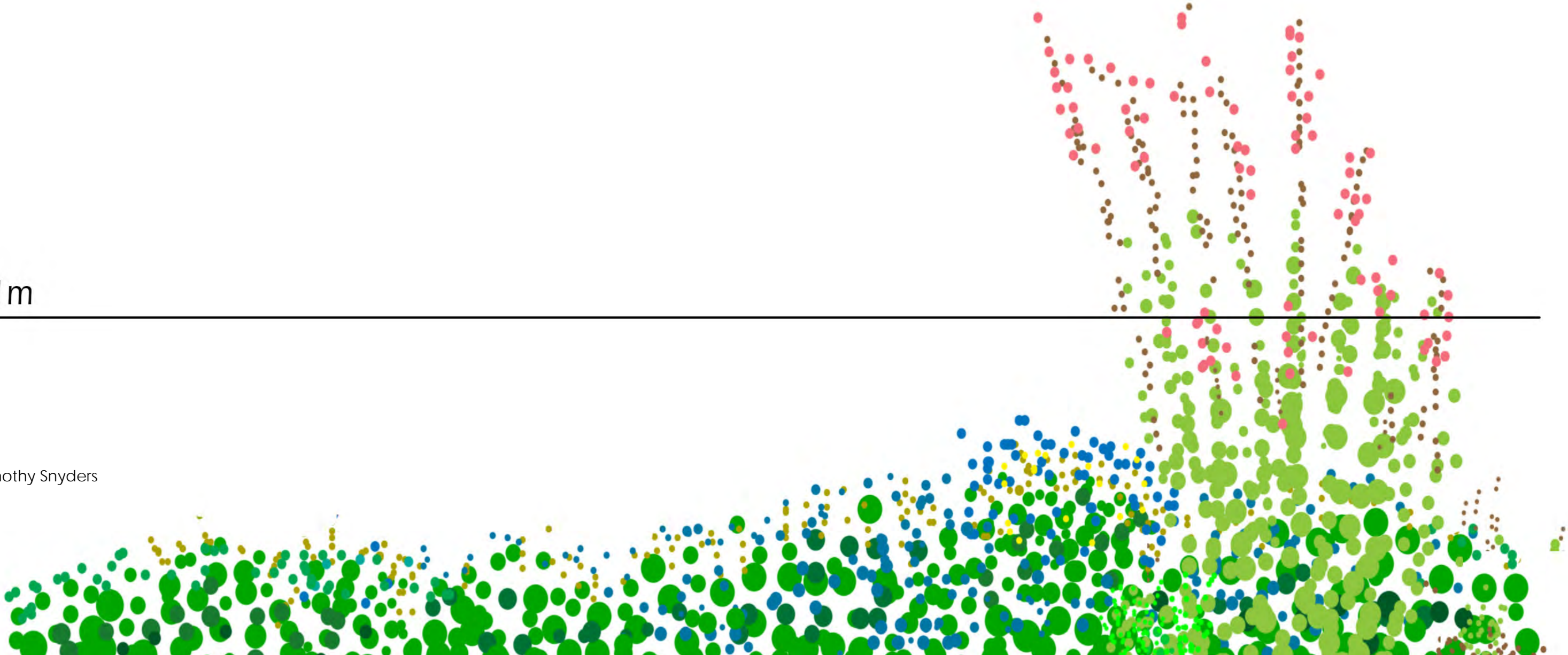
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- Geranium incanum*
- Agathosma capensis*
- Agathosma glabrata*
- Agathosma serpyllacea*
- Aloe commixta*
- Aristea major*
- Elegia fistulosa*
- Athanasia dentata*
- Elegia fenestrata*
- Erica Coccinea*
- Erica mammosa*
- Erica verticillata*
- Gnidia tomentosa*
- Helichrysum dasyanthum*
- digofera cytisoides*
- Leucadendron salignum*
- Leucadendron salignum*
- 'Yellow Devil'
- Leucadendron sessile*
- Leucadendron xanthoconus*
- Leucospermum bolusii*
- Leucospermum hypophyllocarpodendron*
- Leucospermum oleifolium*
- Phyllica ericoides*
- Protea cynaroides*
- Restio similis*
- Serruria aemula*
- Stoebe plumosa*
- Struthiola dodecandra*
- Thamnochortus fraternus*
- Thamnochortus lucens*
- Watsonia borbonica*
- Disphyma crassifolium*
- Felicia aethiopica*
- Heliophila coronopifolia*
- Heliophila coronopifolia*
- Ruschia sarmentosa*
- Sutera hispida*
- Ursinia paleaceae*
- Ursinia speciosa*

Plant List

1m



By: Timothy Snyders

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Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Trees									
<i>Erythrina caffra</i>	Corral tree		single or multi stemmed	10-12m	wet, well-drained, humus-rich soils to dry, clayey soils	warm red to scarlet-coloured (cold winter month-Spring)	full sun	Wood can be used as floats for fishing	http://www.plantzafrika.com/plantefg/erythrinacaff.htm Palgrave, M. 2002:398
<i>Kiggelaria africana</i>			single or multi stemmed	up to 20m	wet, well-drained, humus-rich soils to dry, clayey soils	tiny, bell-shaped flowers are yellow green. August to January (spring to summer)	full sun	general purpose timber	http://www.plantzafrika.com/plantklm/kiggelarafric.htm
<i>Calodendrum capense</i>	Cape Chestnut			7-20m	loamy soil	pale pink but conspicuously dotted with purplish to maroon glands- October-December	full sun	faintly sweet-scented flowers	http://www.plantzafrika.com/plantcd/calodendcape.htm
<i>Ekebergia capensis</i>	Cape ash		large evergreen tree	up to 15m	most soils	small sweetly scented flowers are white	full sun	birds eat fruit, bark used	http://www.plantzafrika.com/plantefg/ekebergcap.htm Gericke, N, etal, 2013:128
<i>Ficus sur</i>	broom cluster fig		Fast growing tall, evergreen, multi-stemmed tree	35m	most soils	figs -September-March	full sun	climbing, edible fruit	http://www.plantzafrika.com/plantefg/ficussur.htm
Thicket									
<i>Tarchonanthus camphoratus</i>			multi-stemmed	2-9m	well drained	creamy-white flowers- April-June	full sun	scented leaves, texture bark, tangled branches	http://www.plantzafrika.com/planttuv/tarchoncamphor.htm
<i>Brachylaena discolor</i>			multi-stemmed	4-10m	well drained sandy soil	creamy-white flowers-July-September	full sun	tangled branches, wind break	http://www.plantzafrika.com/plantab/brachylaendiscol.htm
<i>Psoralea pinnata</i>	Fountain bush		erect shrub/ small tree	up to 4m	streams and wet places	blue, lilac and white, pea-shaped flowers-October -December	full sun	sweet scented flowers	http://www.plantzafrika.com/plantnop/psoraleapin.htm
<i>Pittosporum viridiflorum</i>	Cheesewood		evergreen small tree large shrub	up to 4m	most soils	Small, greenish-white, sweetly fragrant November-December	full sun	stomach complaints, ease pain and have a calming effect, dense	http://www.plantzafrika.com/plantnop/pittosporumvirid.htm
<i>Tecoma capensis</i>	Honey suckle		dense shrub	2-3m	most soil	vary from red, deep orange, yellow to salmon- all year	full sun	sweet resin in flowers	http://www.plantzafrika.com/planttuv/tecomarcap.htm
<i>Idigofera cytisoides</i>			single stemmed shrub	3m		purple-pink - March - July	full sun	aesthetic flowers, dense bush	Manning2007:310

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Shrubs									
Agathosma capensis	buchu		Shrub-ever-green	300-900 can reach 1.5m		Mauve,pink to white July- November	full sun	Fragrant leaves when crushed	http://www.plantzafri-ca.com/plantab/agath-osmacap.htm
Agathosma ciliaris	mountain buchu		small neat shrub	400mm		pink, pom pom like-late winter & spring	full sun-semi shade	Leamon scented leaves	http://www.newplant.co.za/product/agath-osma-ciliaris-pink/
Agathosma glabrata	buchu		shrub	500-1m		bright mauve-pink-July-December	full sun	Lemon scented leaves	http://www.plantzafri-ca.com/plantab/agath-osglab.htm
Agathosma serpyllacea	buchu		round shrublet	300-800		Pink, White to purple- May- December	full sun	Fragrant leaves when crushed	http://www.plantzafri-ca.com/plantab/agath-osserpyl.htm
Erica Coccinea	tassel heath		shrub	1.2m	well drained sandy	all year round	full sun	bright flowers, fine texture foliage	http://www.plantzafri-ca.com/plantefg/ericacocc_subcoc.htm
Erica mammosa	ninepin heath		slow growing, long lived, erect shrub	0.5-1m up to 1.8m (untouched)	well drained sandy	White to pink, purple, orange, Red. Throughout the year, Mainly in December-April	full sun	bright flowers, fine texture foliage	http://www.plantzafri-ca.com/plantefg/ericamammosa.htm
Erica verticillata			Strong growing shrub	1.5m	well drained sandy	Mauve-pink.- Spring-summer.	full sun	bright flowers, fine texture foliage	http://www.plantzafri-ca.com/plantefg/ericaverticil.htm
Gnidia tomentosa			shrub	1m		white clusters- all year round	full sun	Scented at night	Manning. 2007:238
Helichrysum dasyanthum	-		multi-stemmed shrublet	0.3-1m		densely clustered bright yellow- September-November	full sun	erosion control, dense ground cover	http://www.plantzafri-ca.com/planthij/helichrydasyanth.htm
Leucadendron salignum			Multi-stemmed shrub	0.5-2m		May-December. greenish yellow to vivid orange red bracts.	full sun	adapts well to strong pruning	http://www.plantzafri-ca.com/plantklm/leucadenalignum.htm
Leucadendron sessile	sun conebush		rounded, dense Shrub	1-2m		Yellow & bracts yellow turning reddish-July-August	full sun	cut flowers, interesting flower and foliage	http://www.plantzafri-ca.com/plantklm/leucadensessile.htm
Leucadendron xanthoconus	sickle-leaf conebush		dense single stemmed shrub with silvery foliage, relatively fast growing	up to 2m		flowers in August, Fruits are cones	full sun	cut flowers, interesting flower and foliage	http://www.plantzafri-ca.com/plantklm/leucadenxanth.htm
Leucospermum bolusii	Gordon's Bay pincushion		rounded shrub	1.5m		creamy white- September- December	full sun	strong sweet scented flowers	http://www.plantzafri-ca.com/plantklm/leucospermbol.htm
Leucospermum hypophyllocarpodendron	green snake-stem pincushion		Mat like trailing shrub	300-600mm		yellow, tipped with white hairs August to January	full sun	sweet scented flowers	

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Leucospermum oleifolium	heath phylica		tough little bushy shrub	0.6m		white flowers- autumn- Winter	full sun		http://www.plantzafri-ca.com/plantklm/leucospermumoleifolium.htm
Phylica ericoides	heath phyl-ica		tough little bushy shrub	0.6m	well drained	white- February-June	full sun	texture leaf	http://www.plantzafri-ca.com/plantnop/phyliceric.htm
Protea cynaroides	King Protea		woody shrub	normally 1 m but can range from 0.35 - 2m		creamy white to a deep crimson-throughout the year	full sun	striking flower	http://www.plantzafri-ca.com/plantnop/proteacyna.htm
Serruria aemula	strawberry spiderhead		dense shrub-let	500mm		solitary silky (silvery) pink- July- October	full sun	sweetly scented flowers	http://www.plantzafri-ca.com/plantqrs/serruriaaemula.htm
Struthiola dodecandra	Sweet spray flower			1-1.5m		tiny white flowers	Semi-shade full sun	Sweet scented flowers	http://www.newplant.co.za/product/struthiola-dodecandra/
Disphyma crassifolium			mat forming perennial	50mm		white-rose red -July-October	full sun	erosion control, bright flowers	Manning, 2007:328
Heliophila coronopifolia	Wild flax		upright dainty annual	0.6m		bright blue	full sun	fine flowers	http://www.plantzafri-ca.com/planthij/heliophilacoropifolia.htm
Ursinia speciosa	Namaqua-ursinia		sprawling annual	300-450mm		yellow or orange-August - October.	full sun		http://www.plantzafri-ca.com/planttuv/ursini-aspeciosa.htm
Chrysanthemoides monilifera	Bietou, tick berry			2m		yellow- March-September			Joffe,2007:185
Plectranthus xerophilus	Steelpoort spurflower			1-2m		purple -March-June			van Jaarsveld, 2006:165
Metelasia densa	white bristle bush		Multi-stemmed thick shrub, grayish, evergreen	2-5m	Acidic sandy soil	White-pink bristles- June-November-honey scented	full sun	coastal,smell, texture, dense	http://www.plantzafri-ca.com/plantklm/metalmuri.htm
Morella cordifolia	wax berry		Low growing spreading shrub, Evergreen	2-3m can cover 7m2	Acidic sandy soil	Red-tinged buds open and elongate to yellow-brown spikes -April-June	full sun	coastal,sandy, texture, Self rooting. leaves faint smell when crushed	http://www.plantzafri-ca.com/plantklm/morecord.htm
Protea burchellii	Burchell's sugarbush		erect evergreen	1-2x3m	Acidic ,rich well drained soils	cream-coloured to deep carmine-June-August	full sun	large flowers , colour	http://www.plantzafri-ca.com/plantnop/proteaburch.htm
Protea repens	Sugarbush		sturdy dense shrub or small tree	up to 4.5m	Acidic ,rich well drained soils	cream to deep red-summer-winter	full sun	large flowers , colour, nectar	http://www.plantzafri-ca.com/plantnop/protearepens.htm
Pterocelastrus tricuspidatus	Candlewood, Cherrywood		tree or shrub, dense bush	ideal conditions 20 m	sandy soil, coast	creamy-white -early summer	full sun	stick resin from roots and branches,wood	http://www.plantzafri-ca.com/plantnop/pterocelastr.htm

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Rhus lucida	waxy current		shrub-small tree	3-4m up to 7m		small creamy white-October- November	full sun	dense	Palgraves,2002:575
small shrub									
Diosma hirsuta	wild buchu		single stemmed shrub, grey green	0.5-1m	sandy soils	white- September-November	full sun	fruits release fragrant aroma	http://www.plantzafrika.com/plantcd/diosmahirsutbd.htm
Phylica cephalantha	Sandveld Phylica		densely branched shrub	40-90cm	sandy soils	yellowish - April-September	full sun	RED LIST	Manning, 2007:370
Serruria glomerata	cluster spiderhead		shrublet	0.2-0.5m	sandy soils	fragrant cream - August-October	full sun	fragrant flowers, fluffy foliage	http://www.plantzafrika.com/plantqrs/serruriaglom.htm
Stoebe plumosa	slangbos		intricately branched, heath-like shrublet	up to 1m	sandy soil	spikes a golden appearance- April-June	full sun	texture, foliage colour aromatic	http://www.plantzafrika.com/plantqrs/seriphplum.htm
Berzelia abrotanoides	kolkol		softly textured shrub	1.5m	sandy soil	cream to white fluffy ball-like flower- August-November	full sun	softly textured, fluffy ball-like flower	http://www.plantzafrika.com/plantab/berzelabrotan.htm
Chrysanthemoides incana	Bietou		sprawling thorny shrublet	0.8m	sandy soil	yellow- September-May	full sun	thorny	http://www.plantzafrika.com/plantcd/chrysanthmon.htm
Eriocephalus africanus	Wild Rosemary		bushy shrub	up to 1m	clay soil	white- January -November, Best in winter	full sun	grey leaves	http://www.plantzafrika.com/plantefg/eriocephfr.htm
Galenia africana	Geelbos		erect yellow-green shrub	0.5-1.5m		Yellow-green-October-December	full sun	Aromatic	http://www.plantzafrika.com/medmonographs/galeniaafric.pdf
Leucadendron floridum	Flats conebush		tall bushy shrub	2m	sandy soils	yellow-September-October	full sun	silver foliage	http://www.plantzafrika.com/plantklm/leucadendronfloridum.htm
Passerina ericoides	Christmas berry		multi-stemmed shrublet	0.3-1.2m	sandy soils	red- October-November	full sun	sand binders, fleshy berries bitter taste	http://www.plantzafrika.com/plantnop/passeric.htm
Plecostachys serpyllifolia	Cobweb-bush		tangled , sprawling shrub	up to 1m	moist winter soils	yellow to brownish-March-may	full sun	grey foliage, takes wind,. bedding	http://www.plantzafrika.com/plantnop/plecostachysserpyl.htm
Serruria trilopha	trident spiderhead		sprawling, multi-stemmed, resprouting shrub	0.3-0.8m spread 0.8m	acid, sandy soils	coconut-scented, pink-August-October	full sun	endangered, coconut scented flowers	http://www.plantzafrika.com/plantqrs/serrurtriloph.htm
Stilbe albiflora			resprouting shrublet	1.2m	sandy soil	white-November-February	full sun	velvet branches	Manning, 2007:460

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Plectranthus fruticosus				1.5-2m	well drained humus rich	blue purple or pink-March-May			http://www.plantzafrika.com/plantnop/plectfrutjames.htm
Nylandtia spinosa	tortoise berry			1m		purple, pink or white - April- October		spines, grey leaves , mass of clustered flowers	http://www.plantzafrika.com/plantnop/nylandspin.htm
Restio similis			dwarf restio	750mm x500mm		dark brown seed-summer	full sun		http://www.newplant.co.za/product/restio-similis/
Thamnochortus fraternus	cape reed		grass like, uniform in height	0.7x 0.8m with 0.2 at the base		floras bracts, rich red- early may- June (flower) October-November (seeds)	full sun		http://www.plantzafrika.com/planttuy/thamchortfrat.htm
Thamnochortus lucens	jakkalsstert		perennial dwarf restio, compact dense & neat	0.3-0.6x 0.2-0.3m with 0.05-0.2m at the base		shiny bronze inflorescence March -may	full sun		http://www.plantzafrika.com/planttuy/tham-nolucens.htm
Elegia capensis	Horsetail restio		WM\ tufted	3m	sand	very small, white or greenish yellow (October- November)	full sun		http://www.plantzafrika.com/plantefg/elegiacap.htm
Hyparrhenia hirta	common thatching grass		dense grass	0.5-1.2m	sandy-loamy	grass tufts September -June	full sun	thatching	http://www.plantzafrika.com/planthij/hyparrhirta.htm
Ground Cover									
Helichrysum cymosum	gold carpet		ground cover	up to 0.5m		yellow-September-April	full sun=semi-shade	grey leaf, aromatic leaves, pain reliever	http://www.plantzafrika.com/planthij/helichrysumcymcym.htm
Arctotis acaulis	Tufted arctotis			0.3m	sandy-loam	red-white (August-October)	full sun	retain moisture	http://www.plantzafrika.com/plantab/arctotisacaulis.htm
Arctotis fastuosa	Namaqua arctotis			0.3m	sandy-loam	orange (August-October)	full sun	retain moisture	http://www.plantzafrika.com/plantab/arctot-fast.htm
Dimorphotheca fruticosa	Cape daisy			0.3-0.4m	sandy-loam	purple (June-October)	semi-shade	retain moisture	Joffe,2007:290
Dimorphotheca ecklonis	cape daisy			0.3-0.4m	sandy-loam	white (September-November)	semi-shade	retain moisture	Joffe,2007:290

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Medical Plant									
Aloe arborescens	Krants aloe		succulent shrub branched stems	up to 2m.		flower spikes, deep orange- May-July	full sun	spike, texture, leaves. leaf juice used to treat wounds, burns.	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantab/aloearbor.htm ● Gericke. N, etal, 2013:41
Aloe ferox	bitter aloe		succulent shrub, single stemmed, dull green leaves	2-3m	sandy, loamy	candelabra-like flower-head, yellowing orange to bright red.- May-August	full sun	dull green succulent leaves,, sap used in commercial products, spike, texture, succulent leaves	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantab/aloeferox.htm ● Gericke. N, etal, 2013:42
Bulbine frutescens	snake flower		fast growing, branched, succulent perennial	up to 0.3m	most soils	yellow or bright orange - July-December	semi shade to full sun	fleshy, linear green leaves, grow from cuttings flesh leaves treats wounds	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantab/bulbinefrut.htm ● Gericke. N, etal, 2013:70
Carpobrotus edulis	sour fig		fast growing succulent	sprawling, runner up to 0.13m	sandy loamy	vygie flower, yellow to pink -August -October	full sun	easy cuttings, edible fruit, sap used for wounds, also ingested	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantcd/carpobed.htm ● Gericke. N, etal, 2013:78
coleonema album	Cape May		Moderate-low tough &hardy	up to 2m	sandy	white (may-November)	full sun	aesthetic, fragrant foliage, essential oils	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantcd/coleonalbum.htm ● Gericke. N, etal, 2013:98
coleonema pulchellum	Cape May		moderate-low tough &hardy	1.5m	sandy	pink (may-November)	full sun	aesthetic, fragrant foliage, essential oils	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantcd/coleonpulchell.htm ● Gericke. N, etal, 2013:98
Elytropappus rhinocerotis	rhinoceros bush		single stemmed shrub	up to 2m	clayey rich	tiny purple- February - April	full sun	texture, greyish leaves, infusion	http://www.plantzafrica.com/plantefg/elytrorhino.htm

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Eriocephalus africanus	Wild Rosemary		bushy shrub	up to 1m	clay soil	white- January -November, Best in winter	full sun	grey leaves twigs, stomach ache, essential oils	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantefg/eriocephaf.htm ● Gericke. N, etal, 2013:138
Geranium incanum	Carpet Geranium		dense sprawling carpet	up to 0.3m	rich -sandy	Pink- peaks summer months	full sun	colour. texture ingest leaves, fever, diarrhea	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantefg/geraniumincanum.htm ● Gericke. N, etal, 2013:150
Harpephyllum caffrum	wild plum		large, evergreen tree	up to 15m	rich -sandy	whitish green flowers- November - February	full sun	edible fruit	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/planthij/harpephylcaf.htm
Leonotis leonurus	Wild Dagga		robust shrub	2-3m	most soils	white and orange- November-July	full sun	texture, infusion	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantklm/leonotis-leon.htm ● Gericke. N, etal, 2013:188
Lobostemon fruticosus	pajama bush		multi-stemmed evergreen shrub	up to 1m		pink and blue May-December	full sun	colour. hairy leaves, fresh leaves ground and applied to wounds	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantklm/lobostem-frut.htm ● Gericke. N, etal, 2013:192
Mentha longifolia	wild mint		fast-growing, perennial herb	up to 1.5m	most soils	white to mauve - November - April	semi shade to full sun	hairy leaves herb, aromatic, edible. coughs and wounds	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantklm/mentlong.htm
									<ul style="list-style-type: none"> ● Gericke. N, etal, 2013:196
Pelargonium graveolens	Rose-scented pelargonium,		erect, much-branched shrub	up to 1.3m	most soils	white to pinkish August-January	semi shade to full sun	easily propagated, oils ,scented leaves, nerve tonic, sores	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantnop/pelarg-grav.htm ● Gericke. N, etal, 2013:216
Pelargonium tomentosum	Peppermint-scented pelargonium		low-growing, sprawling shrub	0.5m	most soils	purple- October-January	semi shade to full sun	spreading branches, edible peppermint scented leaves	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantnop/pelargtomento.htm
Pelargonium citronellum	lemon-scented pelargonium		busy evergreen shrub	up to 2m	most soils	pink August-January	semi shade to full sun	edible lemon scented leaves, textural leaves	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantnop/pelargcitro.htm
Rhoicissus tomentosa	wild grape		evergreen climber	3-7m	sandy-loamy soil Moderate .moist riverine banks	small, creamy green (midsummer (October-January) Edible fruit (may-June)	semi shade- full sun	self climber, Edible fruit. Attracts birds and useful insects, large leaves	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantqrs/rhoicistom.htm
Salvia africana-caerulea	blue sage,		soft, grayish, hairy, much-branched shrub	up to 2m	sandy-loam	bluish-purple June-December	full sun	aromatic, hairy, stomach pains, colds	<ul style="list-style-type: none"> ● http://www.plantzafrica.com/plantqrs/salviaafricaerul.htm ● Gericke. N, etal, 2013:254

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
Salvia africana-lutea	Beach salvia		aromatic, hardy shrub	up to 2m	sandy	rusty-orange and then reddish brown June-December	full sun	aromatic leaves, hardy	http://www.plantzafrica.com/plantqrs/salviaafricanlut.htm
Salvia chameleagna	Blue salvia		aromatic, hardy shrub	up to 2m	sandy soil-loamy	blue, mauve, pink to pure white (November-May)	full sun	aromatic leaves, hardy	http://www.plantzafrica.com/plantqrs/salvia-chamel.htm
Syzygium cordatum	water berry		evergreen, water-loving tree	8-15m	moist loamy	white to pinkish fragrant- August -November	full sun	dark red edible berries- bland taste, bark stomach complaints	<ul style="list-style-type: none"> • http://www.plantzafrica.com/plantqrs/syzyg-cord.htm • Gericke. N, etal, 2013: 284
Tarchonanthus camphoratus	Camphor bush		small tree large shrub	2-9m	sandy	creamy-white flowers- March-November	full sun	fragrant leaf, aromatic oils, branched structure, leaves help stomach ache, tooth head	<ul style="list-style-type: none"> • http://www.plantzafrica.com/planttuv/tarchon-camphor.htm • Gericke. N, etal, 2013: 286
Tetradenia riparia	Misty Plume Bush		tall, aromatic shrub multi stemmed	up to 5m	sandy loam	white to lilac- June-August	semi shade- full sun	aromatic leaves, cols, coughs, stomach ache	<ul style="list-style-type: none"> • http://www.plantzafrica.com/planttuv/tetraden-ripar.htm • Gericke. N, etal, 2013: 290
Tulbaghia violacea	wild garlic		fast-growing, bulbous	up to 0.5	most soils	pinkish mauve, tubular flowers- January- April	semi-shade- full sun	scented, edible leaves and flowers,	http://www.plantzafrica.com/planttuv/tulbaghviol.htm
Geophyte									
Aristea major	Blue sceptre		bulb	1.5m	well drained loamy soil	tall blue spikes (October-November)	full sun- semi shade	cut flowers	http://www.plantzafrica.com/plantab/aristeacapitata.htm
Ornithogalum thyrsoides	wonder-flower		bulb	20-50cm	well drained soil	white or creamy-white (October-February)	full sun-semi shade	herb & cut flower	http://www.plantzafrica.com/plantnop/ornithogthyr.htm
Gladiolus angustus			bulb	60-120	well drained	cream-pale yellow-October-November	full sun	seasonal colour & form	• Goldblatt et al, 2007:136
Gladiolus scabridus			bulb	1m	well drained loamy soil	bright pink- December-January	full sun	seasonal colour & form	• Goldblatt et al, 2007:94
Moraea speciosa			bulb	0.4-0.75m	well drained loamy	purple-June-December	full sun	seasonal colour & form	• Goldblatt, 1986:122
Moraea alticola			bulb	0.8-1m	well drained loamy	yellow- December-February	full sun	seasonal colour & form	• Goldblatt, 1986:210
Chasmanthe aethiopica	Cobra Lily			0.6m		Orange to yellow- April-June	full sun-semi shade	seasonal colour & form	http://www.plantzafrica.com/plantcd/chasmanaeth.htm

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Mass planting									
Clivia miniata	Bush lily			0.6m	loamy	orange (August-November)			http://www.plantzafri-ca.com/plantcd/clivia-miniata.htm
Clivia miniata 'White'	Bush lily			0.6m	loamy	cream (August-November)	shade	aesthetic, strappy leaves	http://www.plantzafri-ca.com/plantcd/clivia-miniata.htm
Clivia nobilis	Bush lily			0.6m	loamy	orange (early June-September)	shade	aesthetic, strappy leaves	http://www.plantzafri-ca.com/plantcd/clivia-nobilis.htm
Crassula multicava	Fairy crassula			0.3m	most soil	pink-white- July-September		aesthetic, fine flowers	http://www.plantzafri-ca.com/plantcd/crass-multicav.htm
Felicia aethiopica	dwarf Felicia		compact, straggling shrub	up to 1m	most soil	bright blue- with yellow centre all year round	full sun	aesthetic	http://www.plantzafri-ca.com/plantefg/felica-ethiop.htm
Meadow									
Spiloxene capensis	golden star	moderate-low	100-350mm	sandy-loam	golden or pale yellow/ few are white& rarely pink (July-October)	full sun	attracts useful insects		http://www.plantzafri-ca.com/plantqrs/spiloxene.htm
Geissorhiza radians	satin flower		100-350mm	sandy	Deep blue-violet (August to September)	full sun	attracts useful insects		http://www.plantzafri-ca.com/plantefg/geissorhizaradians.htm
Cotula turbinata	Cotula		10-50mm	sandy-loam	yellow- yellow & white (throughout the year)	full sun	attracts useful insects		http://www.plantzafri-ca.com/plantcd/cotula-turbinata.htm

Botanical name	Common Name	Water depth	Growth	Height	Soil	Flowering	Sun requirements	Uses	Source
<i>Dimorphotheca sinuata</i>	African daisy		300mm	sandy-loam	orange, cream, yellow and salmon (mid-winter to mid-autumn)	full sun	attracts useful insects		http://www.plantzafrika.com/plantcd/dimorphsinuata.htm
<i>Dimorphotheca pluvialis</i>	Rain Daisy		200-300mm	sandy-loam	white (spring)	full sun	attracts useful insects		http://www.plantzafrika.com/plantcd/dimorphothecapluvialis.htm
<i>Arctotheca calendula</i>	Cape dandelion		250mm	sandy-loam	yellow (July-October)	full sun	attracts useful insects		http://www.plantzafrika.com/plantab/arctothcalend.htm
<i>Oxalis purpurea</i>	grand duches-sorrel		60-70mm	sandy-loam	pinky mauve to lilac (May-September)	full sun	attracts useful insects		http://www.plantzafrika.com/plantnop/oxalispurp.htm

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