## Meadow Park biodiversity plan of action

July 2023 Michelle Malan, Sun and Soil michelle@sunandsoil.co.za



Brief: Improving the biodiversity, wildlife potential and aesthetic appeal of Meadow Park, Whittler's way, Hout Bay

Aims:

- 1. To increase biodiversity in the area by preserving locally indigenous plants that occur in the park as well as reintroducing plant species from the South Peninsula Granite veld type.
  - 2. To increase the natural beauty of the park as well as creating a stepping stone of wildlife friendly vegetation across what is currently a mown area.
  - 3. To showcase to residents how locally indigenous plants can be used to create a beautiful, low water use and low maintenance planting area.

The result should be a beautiful community space that is valuable for its recreational use, educational purposes, and benefits the ecological health of the surrounding area.

We are privileged to live in the bounds of the Cape Floristic Region, one of the most diverse areas of the planet, yet most of this incredible diversity is confined to nature reserves and mountain tops. Despite being mown for decades, Meadow Park still retains some of its original flora, and through a plan of preservation and planting, it could be brought back to it's original beauty, whilst also serving as a recreational space for the community. Following this plan of action, in a few years, a walk in Meadow Park could be just as beautiful, interesting and refreshing as a walk in a nature reserve. The key is to pay attention to the ecological structure of the planting, planning spaces that are as welcoming to chameleons and herons as they are to dogs and children.



Existing indigenous species growing amongst the grass on site: *Arctotheca prostrata* (perennial herb), *Moraea* species (winter growing bulb), *Cotula turbinata* (annual), *Oxalis* sp. (winter growing bulb), Zantedeschia aethiopica (arum lily). Not pictured: *Romulea* and *Trachyandra* (veldkool) species.

### Meadow Park layout:

1. Potential designated 'no mow\*' area – currently has a few patches of locally indigenous, winter growing bulbs hidden amongst the grass. To be cordoned off and signposted to prevent accidental mowing.

2. Optional second no mow area, currently contains some nice populations of Morea and other winter growing bulbs that could be preserved to create a greater show in years to come.

\*note that 'no mow' areas exist to preserve winter growing, spring flowering bulbs, so they can be mown November to February to keep the grass down without compromising the



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Figure 1: Aerial view of Meadow Park<sup>2</sup> Plan of Action

In order for indigenous plantings to establish strong root systems and be able to survive our dry summers without irrigation, they should be planted in autumn or early winter. We have almost missed that deadline this year, so the greatest impact that can be achieved for the park this year is to preserve the current winter growing/spring flowering bulb population by designating no mow areas and clearing grass from around the bulbs while they are actively growing and flowering, in order to encourage bigger and healthier bulb populations in years to come. These bulbs will become dormant and retreat underground in summer, so it is suggested that the bigger clumps are marked out using latte marker poles. The edges of the 'no mow meadow' (area 1 in Fig. 1) should be clearly marked to prevent mowing and destructive activities such as ball games and mountain biking through the patch, but it is not necessary to exclude walkers and dogs. In fact, this is an area that should encourage slow walks and close observation as the decrease in mowing gives a new diversity of plants an opportunity to establish.

## Action 1: Establish no mow meadow Responsibilities of the CID:

- Designate no mow area with poles forming a permeable 'fence' and prominent signage to prevent mowing.
- Communicate with municipality to prevent mowing or restrict mowing to summer months between November and February.

- Gather community volunteer group to attend Community Conservation Day - Provide materials for marking plants (suggest 5-10cm diameter latte poles, cut into 60cm lengths, will need at least ten for Community Conservation Day)

#### Services provided by Michelle Malan/Sun and Soil:

- Assistance with identifying existing indigenous plant/bulb clumps within the no mow meadow area

- Facilitate Community Conservation Day: Give introductory talk, guide groups in hand weeding, identifying plants, be available to answer questions during session. - - **Provisional date:** Saturday 12th August



Paths can be mown through the no mow area to provide access to the centre if walking through long grass is not appealing

No mow area should be clearly signposted



(photo from Wildflower Stepping Stones Project)  $^3$ 



Elegia tectorum, Salvia Africana, Gnidia squarrosa, Chironia baccifera, Coleonoma album

As we are at the end of winter, planting an extensive area of new plants is not ideal, as they will not have time to establish strong root systems to get them through summer. However, it is still possible to plant a small demonstration bed to show the community what plants could be introduced to the park in a larger planting planned for autumn 2024. The aim for this is to raise awareness and support for the larger planting plan.

Area 3 in Fig. 1, next to the access path from Meadow Close is the suggested site for this planting. There is a wedge-shaped area of roughly 8m<sup>2</sup> that could be used to showcase plants from the South Peninsula Granite vegetation type. 10-15 species, including those pictured above can be included. This will not be an instant garden, the plants used will be small, as they will establish better than a large plant. Once these have matured they can also be used as 'mother plants' to propagate from for larger future plantings.

This planting may need hand watering once a week to get it through the first summer. Plants should be labelled in same style as the no mow meadow so that residents can identify what is growing.

# Action 2: Plant demonstration bed of locally indigenous plants Responsibilities of the CID:

- Approve area to be planted
- Designate funding for plants, mulch, and time/labour provided by Michelle Malan/Sun and Soil
- Gather community volunteer group to attend community planting day

- Provide signage for demo bed

### Services provided by Michelle Malan/Sun and Soil:

- Design of planting plan

- Sourcing of plants and mulch (plants will be sourced from local gene stock where possible) - Delivery of plants and mulch to site

- Facilitation of community planting day
- Cost:
- Plant sourcing and bed prepping:
- Plant and mulch
- Facilitation of community planting day:
- Two Follow up/maintenance sessions:
- Provisional date: Saturday 19th August

### Looking forward: longer term plans

It takes three years, on average, for a new garden to get into its stride, developing its own ecosystem and becoming fairly self sustaining. The major work of restoring diversity (and beauty) to meadow park should be seen as a long term plan. Bulbs take about three years to get to flowering size from seed so work done in spring of this year (2023) to allow for the bulbs to flower and set seed will only show results in bigger patches of flowers in three years time. The increase in spread of annual flowers such as *Cotula* will be much quicker. Shrubs take a year or two to reach maturity, especially if planted small to establish resilience to summer drought. It is important to communicate with residents that any planting or conservation work done here will not give 'instant garden' results.

Providing there is support from the community, there is so much potential for Meadow Park to become a beautiful biodiversity area. The following is a proposed timeline for developing further plantings and habitat areas:

**October/November 2023:** form a propagation group of residents who will attend workshop run by Sun and Soil and can then be asked to propagate/look after small numbers of plants destined for the park.

**November 2023– February 2024:** No mow meadow can be mown if required. Demo garden may need once weekly hand watering if plants show sign of stress.

**February 2024:** Finalise planting areas to focus on in autumn/winter 2023. potential key areas include:

- Seasonal wetland area along drainage ditch
- Tree planting (develop tree list)
- Themed sensory or insect garden around children's play area
- Slope between meadow area and playing field

Extent of planting to be determined by funding/community involvement March 2024 – second propagation group meeting – to make autumn cuttings and possibly sow bulb/winter annual seeds if acquired.

April/May 2024 – first planting session for new areas. Wetland area should be a priority before it gets too wet and tricky. Dry bulbs are easier to plant into steep slopes at this stage. June/July 2024 – second planting session and weeding/clearing of grass around bulb

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populations in no mow meadow.

**August - October 2024** – propagation group collect seed from bulbs in no mow meadow, to be sown following autumn. Take cuttings of shrubs to be looked after in private gardens over summer and planted in autumn 2025.

If carefully designed, indigenous plantings should be low maintenance, but will not be maintenance free. It will be important at this point to train a maintenance team - whether these are paid labourers or a team of interested volunteers – as the maintenance practices required are different to conventional gardening. A monthly session should be sufficient through the summer months.

#### Services offered by Sun and Soil for extended planting:

Plant selection and planting plans, facilitation and training of volunteer/maintenance groups, implementation of planting design. The extent and cost of these services will need to be determined as the budget and plans for the park develop.

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## Sample Species list (shrubs and groundcovers) All

species are from the South Peninsula Granite Fynbos veld type, unless marked 'Dune Strandveld'- which is the neighbouring veld type

These plants are easily sourced so form the backbone of the planting. They have been chosen to provide a variety of flower shapes, supporting a diversity of pollinators, as well as for their structure.

(Dun	e Strandveld) Shorter 'fishhoek' variety – max height 1.5
Elegia tectorum	summer. S chameleagnea forms a denser plant
Salvia chameleagnea or africana	and prefers a damper spot
Gnidia squarrosa	Loose, see through shrub to 2m. Cream, night scented flowers from June to October
Chironia baccifera	Rounded or sprawling shrub 40cm-1m. Starry pink flowers midsummer to autumn, red berries follow
<i>Coleonoma album</i> metres	(Dune strandveld) rounded Buchu to 2m tall (keep pruned). Small, white honey-scented flowers
Aromatic shrub to 1.5m. Blue flowe	rs in

Helichrysum cymosum Low shrub with silver-gre	ey foliage and yellow flowers in summer.
Evergreen shrub/	small tree 1-4m. Purple flowers visited by
Polygala myrtifolia Gnidia pinifolia	Athanasia trifurcata Pelargonium capitatum
Agathosma capensis Felicia filifolia	carpenter bees peak in autumn and spring
	Loose shrub to 1m with long tubular white flowers, moth pollinated. Flowers through the

year.	daisy flowers in spring
Rounded shrub to 1m. Mauve to white flowers	Shrub to 1m. Silver green foliage and heads of
all year but mainly in spring. Scented leaves	bright yellow flowers in summer
loved by stick insects.	Sprawling shrub with soft leaves and pink
(Dune strandveld) compact shrub to 1m. Purple	flowers in late spring and summer

Phylica ericoides Spreading shrub to 1m with white button flowersSelago canescensSelago canescens

Stachys aethiopica Spreading groundcover with white flowers for semi-shade 6