## MISTY CLIFFS DEVELOPMENT, BUILDING, LANDSCAPING AND HORTICULTURAL GUIDELINES

The provisions and recommendations contained within these guidelines represent concordance with the National Building Regulations, anticipation of Special Area Status, and consultations with and inputs from relevant departments of the City of Cape Town, South African National Parks, and the Cape Peninsula University of Technology.

Compiled and published by the Misty Cliffs Village Association P.O. Box 43977 Scarborough 7975

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## 1 INTRODUCTION

Misty Cliffs is located within a larger conservation area of incredible natural beauty, and is surrounded by pristine ocean and mountains.

The realisation of Misty Cliffs as a conservation village depends not only on control but on education and guidance, hence, architectural and other relevant landscaping guidelines are particularly important towards ensuring positive development within the Village as a whole. They describe the quality of the area and the nature of development that is likely to be permitted, thereby ensuring that the local authority is consistent in its management of the area in terms of maintenance and enhancement of the public environment, as well as general development control.

The following sections provide these guidelines to inform, assist and benefit architects, designers, homebuilders, landscapers and others towards creating distinctive, visually attractive and livable homes in harmony with the unique environment and with the Village as a whole.

The guidelines are in no way an attempt to restrict or constrain design but rather are provided towards imparting an harmonious and congruent feeling to Misty Cliffs and to protect the Village, its properties and the surrounding environment. They are in place to protect the homeowners' interests and to forestall any possibility of future conflict or disputes, while allowing enough variety for each home to be unique.

## 2 LEGAL FRAMEWORK AND PROCEDURES

#### **Proclamation**

The guidelines are endorsed by both the community and the local authority - the City of Cape Town. They may be freely downloaded from the website **www.mistycliffs.org.za** The guidelines and the proclamation of Misty Cliffs as a "Special Area" have hitherto been subject to the (former) Divisional Council of the Cape, Town Planning Regulations. This status is presently under review within the criteria of the incoming Integrated Zoning Scheme (IZS).

The purpose of this proclamation was to ensure that all future development in the Misty Cliffs (and Scarborough) area is compatible and in harmony with its environmental setting and conservation objectives by controlling the external appearances, environmental impacts, and the designs of new and altered buildings and other structures, including signs, water features, earthworks, landscaping devices, driveways and paving.

#### 2.1 Architectural Advisor

Before their submission to the local authority all plans for alterations, additions or new construction in this area must be submitted to the Misty Cliffs Village Association (MCVA) executive committee (EC) for consideration by its Architectural Advisor, whose role is to manage the interpretation of the guidelines, assess such plans and make corresponding recommendations to the EC. The MCVA management committee changes in composition

periodically as does the identity of the member tasked with handling inquiries from prospective developers and builders. Consult the website **www.mistycliffs.org.za** for the latest information.

Recommendations may include the need for amendments and the offering of constructive suggestions. The process has been mandated by the City's South Peninsula Administration (SPA) Urban and Environmental Planning Committee, which will not approve plans in terms of the National Building Regulations and Zoning Scheme Regulations until they have been previewed and passed by the MCVA.

Plans which are found to be in some way unacceptable are referred back to the applicants for amendment. Applicants are welcome to make representations to the EC.

Should a dispute arise an applicant can ask to submit the proposal directly to the Urban and Environmental Planning Committee. However, there is no provision for appeal to the Premier of the Western Cape should the Urban Environmental Committee reject a submission.

## 2.2 Specialist Consultants

Specialist consultants are available to assist any applicant towards obtaining approval, at the applicant's own cost.

## 2.3 Preparation of Plans

It is strongly recommended that plans should be prepared by an architect. It is advisable to engage one with local experience, familiar with design work in the area, and experienced with the cost and technical difficulties of (in most cases) mountainside construction. To save on time and cost it is usually well worthwhile to submit sketch plans to the MCVA before any detailed plans are prepared.

The Cape Institute of Architects, telephone/fax 021-424-7128 can provide a list of local professionals.

## 2.4 Approval of Plans

By agreement with the local authority, owners are charged (presently R2 500) for the submission of plans to the MCVA in order to cover professional fees for the scrutiny of plans and the subsequent monitoring of their implementation.

The EC can at any stage in the process request further supporting information so as to assess the measures envisaged for avoiding or mitigating any difficulties and impacts identified.

Two copies of plans are required for submission to the MCVA. One copy will be returned to the applicant.

Site plans should show level contours across the site at 1 m intervals, as well as important natural features such as large rocks, streams and all site boundaries and building lines/set-backs. Alterations and additions to existing buildings should be coloured or shaded.

If application is made for departures from the Zoning Scheme Regulations, a formal and technical letter of motivation must accompany the application; all neighbouring buildings must be shown on the associated site plan.

## 2.5 Building Agreement

Before any construction in Misty Cliffs can commence, including preliminary work such as site clearing and excavation, the property owner is required to make a refundable deposit to the Village Association, presently R10 000, to cover the cost of possible damage to the environment, including the road, by the contractor and / or his subcontractors, and / or associated services such as materials deliveries. To this end the owner must enter into an Agreement with the appointed contractor, the purpose of which is to ensure that the contractor operates with due care, and is aware that the responsibility for rectification of damage, and the costs thereof, are for his account, and separate from the contract price. It should be carefully noted that the Village Association holds the owner primarily responsible for execution of the contract, simply because the MCVA has no jurisdiction over an appointed contractor.

The Agreement is appended to these guidelines for information, and may be downloaded separately from the MCVA website for use.

## 3 GUIDELINES FOR DEVELOPMENT AND DESIGN

Mountainside houses form a backdrop to the whole Village. Because of the small size and orientation of plots, over-scale and / or insensitive "statement-type" designs present a real threat of the Village losing its charm and becoming over-urbanised, in the process compromising the natural flora flowing down from the mountain between the houses. Designs incorporating terraces, positive outdoor spaces and broken-down forms are generally the most appropriate.

Houses with low horizontal profiles, built on terraces with natural materials like stone and wood, for example, are the most successful, with colours taken from the natural environment. Planting of trees and indigenous gardens should be prioritised.

Houses on the seaward side of the Main Road are part of the scenic drive through Misty Cliffs and Scarborough to Cape Point. Stone terraced gardens with indigenous fynbos are very appropriate and enhance the scenic experience. Pre-cast concrete retaining structures, vibracrete walls and kikuyu grass lawns are inappropriate and not permitted.

## 3.1 The guidelines are informed by the following principles:

- 1. Responsibility towards the natural environment.
- 2. Response to climatic conditions.
- 3. Favourable relationship between building and street.
- 4. Maintaining the "fynbos green" characteristic.
- 5. Sensitivity towards neighbours and the neighbourhood.
- 6. General recommendations on colour and materials.

## 3.1.1 Responsibility towards the natural environment

Situated within a proclaimed national park and surrounded by mountain, sea and protected fynbos, buildings in Misty Cliffs must respond appropriately to their setting.

## **Guidelines:**

Before designing for Misty Cliffs, out-of-town architects should make some visits to the area to become familiar with the natural environment that will form the context of the new building or alteration. It is particularly important to take into account that Misty Cliffs is a high fire risk area, with gale-driven bush fires annually and major out-of-control fires every few years.

Building components should be expressed in groupings of smaller elements that form protected outdoor space, rather than large monolithic blocks.

Articulate buildings and walls and other structures in such a way as to maintain the flow of vegetation around and between buildings and neighbours.

Allow for the existing features of the site such as indigenous trees and notable rock formations to be retained wherever possible.

Design for energy efficiency, including choice of building materials, and consider saving and storing water from roofs, and economising on electricity by including solar water heating.

Houses should be located on their plots in such a way as to maintain sufficient areas of natural ground and vegetation to absorb the storm water run-off from roofs and hard surfaces, and to allow for fynbos gardens. The coverage of a plot by buildings and hard-surfaced areas must therefore not exceed 50 percent of the site area. Natural materials that blend with the environment are recommended. See Diagram 1.

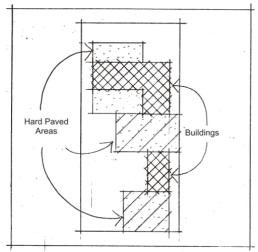


Diagram 1: Limiting surface run-off – max. 50% non-permeable coverage

## 3.1.2 Response to climatic conditions

The local climate is characterised by hot summers with prevailing winds from the south-east (gale force at times) and cooler winters with prevailing winds from the north-west (normally bringing rain and occasional severe storms).

The pattern of sun varies from long days in the summer with the sun setting horizontally south-west over the sea in mid-summer, thus creating strong glare and heat, and shorter days in winter with the sun lower, and appearing late because of the mountains to the east, before setting in the north-west.

There are also various micro-climate anomalies with some areas experiencing particularly strong winds at certain times of the year and others not. This has to be discovered through site analysis; it can be useful to consult with established house owners. The narrowness of most plots dictates the need for care and consideration in design and positioning so that neighbouring houses are not overshadowed, especially in winter. Cognizance must also be taken of the intense glare off the sea on summer evenings. Houses that respond sensitively to their site and microclimate almost invariably fit in logically with their location.

## **Guidelines:**

Orientate and lay out the house to provide wind-sheltered outdoor spaces while at the same time ensuring that this does not have an adverse effect on neighbours. To achieve this the building form needs to be broken down so that parts of the building shelter the outside space from the wind.

Usable outdoor space is a valuable investment, enhancing the effective area of a home as well as offering much in terms of a relationship between the house and the garden.

The proposed "broken down" form of building, similar to farm buildings with separate outbuildings, could form part of a language for building within Misty Cliffs, thereby enhancing the overall environment and limiting the overall bulk of buildings. See Diagram 2.

Set back large areas of glass on the north and west sides by means of roof over-hangs, porches and pergolas to avoid over-heating and glare from the sun. See Diagram 3.

Mirror glass may not be used.

External doors should be under cover as they invariably perform poorly when exposed directly to the weather.

Baboon-proofing: All new buildings/alterations must incorporate a lockable pantry or food cupboard and fridge cupboard. It must be shown therefore that food will normally be locked away. Round handles are recommended for all exterior doors, and internal bolts for sliding doors and windows. Doors, windows, fanlights, skylights etc, together with their furniture, should be chosen to defy inquisitive baboons. The animals are experienced vandals and raiders and can lift or shake sliding doors and windows out of their tracks and operate or break ordinary types of knobs, handles, latches etc. Baboons commonly insert a small troopmember through burglar bars or part-open windows; the intruder then works from inside to either open windows further or pass stolen food through the gaps. It is wise to fit door-closers where appropriate; this precaution also prevents slamming during high wind conditions. Compost bins and worm farms should be lockable. Fruit trees and vegetable patches should be enclosed by baboon-proof cages. These features must be shown on plans wherever applicable.

Serious cognizance should be taken of the danger from intense wild fires that inevitably occur every few years. It is strongly recommended that all glazing on the south and east aspects should be provided with external metal blinds or fire/heat-resistant shutters to prevent fire entering through a heat-broken window.

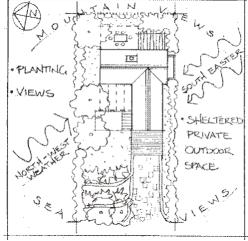


Diagram 2: Example of a site solution

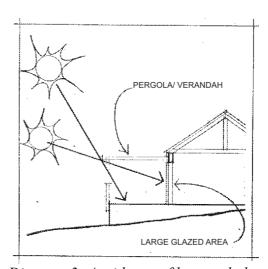


Diagram 3: Avoidance of heat and glare

## 3.1.3 Positive relationship between building and street

The street, especially Old Camp Road, is in effect a positive public space, an extension of the living environment, and needs to be safe for children, pleasant to walk along, and offering opportunities to connect with other residents. See Diagram 4.

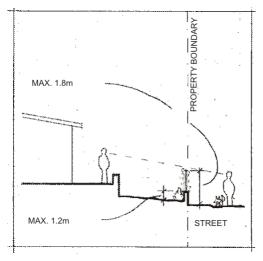


Diagram 4: "Hullo, neighbour!"

#### **Guidelines:**

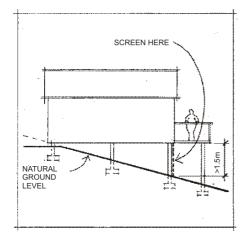
The relationship between the building and the street should be positive, visually permeable and human-scaled. If plot demarcation is necessary, hedges, timber fences and low stone walls are recommended. The maximum height for any solid, non-visually permeable boundary wall is 1.2 m from the natural ground line below it, and the maximum height for any visually permeable boundary fence (eg. timber palisade fence) is 1.8 m from the natural ground line below it.

Pre-cast concrete panel walls and steel palisade fences are not acceptable.

Where the steepness of the site is such that it is impossible to build garages on the 4.5 m building line set-back (i.e. 1 in 4 slope or greater), garages may be allowed on the street boundary line with a maximum width of 6 m (which is sufficient for a double garage.) When applying for a departure to build on the street boundary line, the following are permissible: A single storey building, or a room in the roof, or a 1.5 m setback of the first floor.

Buildings on stilts are acceptable ONLY where the steep slope of the ground compels it.

Dark voids under houses that are raised up on poles or cantilevered out from steep sloping sites must be avoided. Where houses are raised more than 1.5 m above ground level, the residual void underneath may not be deeper than 3 m on plan. Any void higher or deeper than this should be screened. See Diagram 5.



Voids are considered as a floor in the application of the 2.5 m storey regulation limit. Refer to Principle 3.1.5.

Cut and fill for building platforms should be human-scaled. No change of levels may be greater than 2 m at a time.

Street signs where required should not be visually intrusive.

No lighting shall pool outside a property boundary, therefore outside lighting should be of up or down lit type, preferably the latter.

Diagram 5: Screen voids beneath houses

## 3.1.4 Maintaining the "fynbos green" character

Misty Cliffs is characterised by extensive vegetated areas around and between houses. To maintain this it is suggested that private spaces should be created, demarcated by buildings, thereby freeing unused space for indigenous gardens that if necessary can be divided from neighbours by a mesh fence or similar device.

## **Guidelines:**

As for Principle 3.1.3 If plot demarcation is necessary, hedges, timber fences and low stone walls are recommended. The maximum height for any solid, non-visually permeable boundary wall is 1.2 m from the natural ground line below it. The maximum height for any visually permeable boundary fence (eg. timber palisade fence) is 1.8 m from the natural ground line below it.

As previously stated, pre-cast concrete panel walls and steel palisade fences are not acceptable.

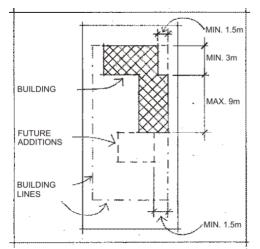
## 3.1.5 Sensitivity to the neighbourhood and to neighbouring buildings

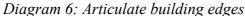
Firstly, the neighbourhood should have the feel of "houses amid nature" rather than that of an ordinary urban setting. Restraint of height, and massing, are the two most important determinants in the appearance of the built environment within this conservation area.

Secondly, because the plot sizes within Misty Cliffs are extremely limiting, buildings are often very close to one another. It is important to take into consideration the impact of a new building in relation to views and to access to north sunlight for existing and future buildings.

## **Guidelines:**

Regardless of its direction, no continuous building element may exceed 9 m in length, after which it must be set back by a minimum depth of 1.5 m for a minimum length of 3 m.





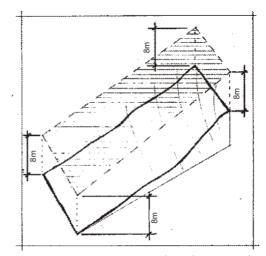


Diagram 7: Maximum height, 8 m plate

The maximum height of any building (excluding chimneys and finials) shall be defined by an 8 m plate over the site, measured from natural ground level at all cadastral corners of the site. See Diagram 7.

Three-storey buildings are not acceptable other than where the third level is truly either a basement or a room in the roof. A basement is defined as having at least 50 per cent of the floor area at least 2 m below the deemed natural ground levels of the area of that basement. A room in the roof is defined as having an internal height such that the walls along the eaves are not more than 1.5 m in height. See Diagram 8.

Where the building is NOT on a steep site the upper floor coverage, including balconies, should not exceed 70 per cent of the ground floor coverage. Any area of pitched roof which exceeds 4.2 m in height from natural ground level will be included in the 70 per cent calculation, including double volume areas.

## **Solar heating**

The westerly orientation of Misty Cliffs is ideal for solar heating to be installed from the outset, and cost is minimised and effectiveness maximised if it is plumbed in appropriately from the outset. In addition to information available from suppliers, useful general information may be downloaded from the Eskom website:

www.eskomdsm.co.za/?q=Solar water heating Read more

In further pursuit of electrical economy it is strongly recommended that the hot water reticulation system be comprehensively lagged at installation.

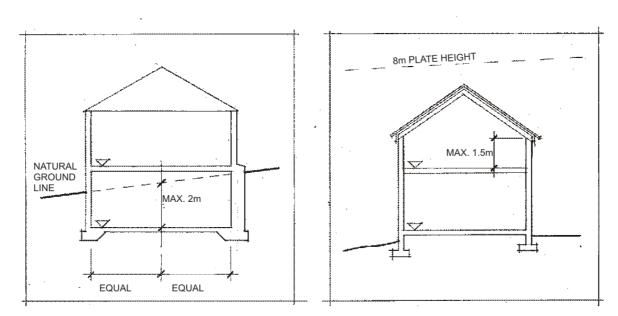


Diagram 8: Basement, left, and room in the roof, right

To limit overshadowing of neighbouring buildings the area within 4 m of the boundary may not protrude above a 45 degree line from 3 m at the boundary line. See Diagram 9. On steeply sloping sites for a maximum of 6 m building width this would not apply. See Diagram 10. If applying for the 6 m exception from the 45 degree rule the applicant must show that there is no negative impact on the neighbouring property. The footprint and windows of the affected neighbouring building must be shown.

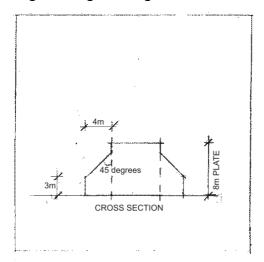


Diagram 9: Building envelope

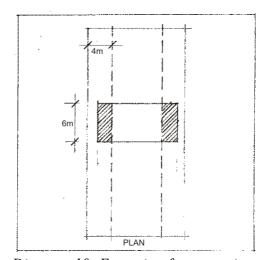


Diagram 10: Exception for steep sites

Timber houses must have access for fire-fighting. In the case of timber houses the 1.5 m side boundary set-back is mandatory for the side walls.

## 3.1.6 General recommendations on colour and materials

For buildings on the mountain side, colours should be selected from those of the natural background (found in the natural sandstone on the site) to minimise visual impact. Darker shades of these natural colours have less impact than lighter tints.

White finishes are acceptable for houses below the main road, i.e., between the main road and the sea

Natural materials are recommended. Avoid materials that conform to a "machine aesthetic" such as expanses of concrete, aluminium and glass. Prefabricated concrete products such as retaining structures, concrete panel walls and concrete face bricks, together with artificial rocks and similar proprietary items are discouraged, but "bagged" clay brickwork is acceptable. *Materials that burn or deform under heat should not be used on the south and east aspects*.

Buildings should visually read lighter in weight towards the top.

## 3.2 HARD LANDSCAPING GUIDELINES

#### Walls/Fences

Boundary walls should be lower than 1.2 m and built of solid stone. All walls should be of sandstone as found on the site, preferably dry-packed or with any necessary dagha concealed as far as possible. These low walls can be used aesthetically to define properties. Planting should be used as a screen rather than as an opaque barrier.

The use of climbing plants on walls, trellises and fences is encouraged. Indigenous shrub screens or informal hedges can be used advantageously.

Entrances may be defined with columns and / or gates. Walls should match the style and materials used in the building.

Under no circumstances may vibracrete walls or any walls of an unsuitable style or colour be allowed. Artificial rock may not be used in place of genuine rock. The style of wall / fence should match the architectural style of the building, or the aesthetic style of the village. Low stone walls or stone columns are recommended. If at all possible stonework should be carried out by a stonemason approved by the Village Association.

## Retaining Walls / Steps / Ramps

External changes in level should be addressed by creating terraces with low stone retaining walls and steps or ramps. Terraces should be constructed using dry-packed stone. Treated timber or sleeper retaining walls may be used if planted using indigenous shrubs and groundcovers.

Walls of 'Terraforce', 'Loffelstein', masonry or artificial rock may not be used.

No retaining walls may be higher than 1.5 m. All retaining walls should be designed and / or

checked by an engineer.

## **Pergolas**

Pergolas may be used as a device for creating external passageways and to define courtyards or vistas. Materials should be congruent with building materials, i.e., columns to match buildings, timber to match window frames. Use of climbing plants or creepers is encouraged to cover pergolas and create shade.

## **Swimming Pools and Water Features**

Swimming pools, water features and fountains may be used to cool external spaces and to complement design styles of the landscape. They should be designed in the character and style of the village. "Rock pools", "beach pools" and artificial rock are not acceptable. Pool fences must conform to National Building Regulations but should be constructed from stone or timber to match the village as a whole or the particular property.

## **Gazebos and Lapas**

Gazebos, lapas and braai areas must match the architectural style of the Village. Victorian, thatch or rural lapas will not be approved. Proposals for all gazebos, lapas and braai areas should be submitted to the Village Association for approval.

#### Hard-surfaced areas

All roads, driveways, paving and courtyards should be designed to retain the overall natural aesthetic character of the Village, and materials chosen accordingly. Gravel may be used as an alternative to hard paving. Black tar, formal kerbs and glass blocks are not acceptable. All hard surfaced areas should take into account any proposed road reserve trees. A planting area, minimum 2 m x 2 m, should be allowed for surrounding any roadside tree.

Sleeper pathways, timber log pathways and steps are acceptable. Timber decks that do not protrude over the building lines are also acceptable.

No paving area may extend further than 7 m along any road edge. Where a paving area is larger than 7 m<sup>2</sup>, it should be set back on the property boundary and screened from the road using indigenous planting.

## Signage and Numbering

Signage and house numbering should be indicated on the building plans and should conform to the following guidelines:

Lettering should be brass, natural timber or metal (black / charcoal grey).

Additional lettering using reflective material must be provided and set visibly for security and emergency identification in the dark.

Numerals should be no larger than 100 mm in height.

## Garden furniture / secondary elements

Garden elements such as garden furniture, pots, benches, birdbaths etc should be chosen to enhance the character of gardens and buildings. Wendy houses and sheds are also permissible options.

#### **Pedestrian Paths**

All pedestrian paths should match the materials used elsewhere on the property, and conform to the paving materials listed.

#### **Boardwalks**

Boardwalks must be designed and / or structurally checked by an engineer. They should be constructed of pressure-treated timber in natural colour. Structurally critical fastenings should be of marine grade stainless steel, and other fastenings of galvanized steel. Railings should match the style used on the building or the natural timber of the structure.

#### 3.3 EXTERNAL DRAINAGE

Ideally, storm water should be dispersed in grassed or reeded channels, or be allowed to reach detention areas. On restricted sites where this may not be feasible, storm water velocity should be reduced by stepping, if necessary, and routed to the roadway channels in such a way as not to collect soil or scour or undermine landscaping devices.

## 3.4 EXTERNAL LIGHTING

External lighting should be kept to a minimum. The effect of lighting on the view from properties higher up the mountainside should be considered. Lights should be fixed to walls or columns. If garden up-lighters are installed, they should be black.

Generally, roads should not be lit. Courtyards and parking areas should be minimally lit and should be restricted to porticoes wherever possible.

Spot lighting or "always-on" bright security lighting shall not be allowed. Security floodlights should be automatically controlled to go off after five minutes unless manually over-ridden.

Light fittings should be selected and site-adjusted so as to contain the pool within the area of the property.

# 4 SOFT SURFACING OR LANDSCAPING; VEGETATION TYPES AND HORTICULTURAL GUIDELINES

## **Topography and Soil**

The rocky areas of the Village are mainly composed of Table Mountain Sandstone ("TMS"), with pockets of quartzites. These materials are erosion-resistant, acidic and the associated soils are nutrient-poor but favour growing conditions for fynbos plant communities.

## **Fynbos Diversity**

The Cape Floral Kingdom with more than 8 000 different plant species is both the smallest and the richest of the world's floral kingdoms, with the highest concentration of plant species - 1,300 over 10,000 km<sup>2</sup>. Fynbos is characterised by the presence of the following three elements:

- A restioid component, belonging to the *Restionaceae* or Cape reed family.
- An ericoid or heath component, comprising by far the majority of plant species, and in which *Ericaceae* feature prominently.
- A proteoid component of almost exclusively *Proteaceae*.

Cape Fynbos is regarded as a wonder of the world and its natural habitat is recognized as a "Hot Spot" of floral biodiversity with more than 2 285 different plant species just in the Cape Peninsula. Hot Spots are defined as areas having high species richness and a high proportion of endemics. The concentration of endemic species is very high with at least 41 per cent of the Peninsula's endemic species currently Red Data Book listed. Many are extremely localised and are obviously in imminent danger of extinction. Interestingly, there is a strong correlation between the distribution of endemic animals (primarily invertebrates) and endemic plants.

Because of the absence of grass and berry-producing plants the floristic diversity of the Cape Peninsula fynbos is not paralleled by an equally rich fauna. Fynbos has a low animal biomass, although species richness of birds, small mammals, frogs, reptiles and insects is quite high. Although these animals play a major role in pollination and seed dispersal, they appear to play a minor part in influencing vegetation structure and composition. This is partly because of the high carbon to nitrogen ratio, which effectively excludes browsing of all but the youngest leaves. Fire is a major influence on fynbos community processes. Cape fynbos is a very valuable natural heritage and requires priority conservation planning and management to avoid severe negative consequences.

## 4.1 CONSERVATION

## **Conservation Importance and Action**

- 1. Misty Cliffs Village and its surrounds are extremely attractive visually, with mountains and ocean, rich fynbos and pleasing tranquility, therefore preservation of this jewel should be a conservation priority for every village resident. The focus should be on implementation of suitable landscaping controls and roadside rehabilitation, using indigenous and endemic plants.
- 2. All Village property owners should be encouraged to care for their fynbos. It is strongly recommended that they empower their care duty by joining the Botanical Society of South Africa to learn about fynbos ecology and how to grow indigenous plants.
- 3. Similarly, it is suggested that they participate in search and rescue programmes for endangered species to locate, propagate and return them to suitable new and safe habitats.
- 4. Similarly, help the Protea Atlas Project (contact the National Botanical Institute), which aims to map the proteas for conservation, horticultural and scientific purposes.
- 5. Consult the botanical study assessment of the Misty Cliffs flora, which was conducted by Terry Trinder-Smith of the UCT Botany Department.
- 6. Grow plants endemic to the area, which require relatively little water, thus reducing the need to dam pristine mountain areas or burden the already-strained municipal Water Services.
- 7. Initiate a hack group and help remove alien invasive species.
- 8. Publicly inform visitors to the Misty Cliffs area of its biodiversity, such as appropriate conservation orientated signage, especially along the coastal roadsides.
- 9. Work towards a long-term strategy to proclaim Misty Cliffs a Biosphere Reserve.
- 10. Campaign vigorously against proposed housing and township developments that give little or no consideration for the preservation of either the built and / or the natural environments.

## **Habitat Conservation**

Effective habitat conservation relies on an adequate system of protected areas, as well as the protection or sustainable use of biodiversity outside formally protected areas.

Ecosystems are not made up of plants alone and the animals that are endemic to an area form an integral part of its health. Insensitive developments, the rapid infestation of alien invader plants,

and incorrect fire regimes are presently the most significant threats to habitat destruction. Moreover, the conservation objectives of even well-designed developments can fail if reckless or uninformed procedures are used for site clearing and construction. Once species and habitats are lost they can never be replaced.

#### 4.2 ALIEN INVADER PLANTS

## **Impact of Alien Plants**

Invasive alien species can have a major negative impact on the environment. Next to direct habitat destruction, invading alien organisms are regarded as the biggest threat to biodiversity, and southern Africa could lose almost a quarter of its plant species from the fynbos region alone because of invading alien plants.

Other adverse impacts include:

- 1. Reducing stream flow, particularly when replacing fynbos with tree species which use more water.
- 2. Reducing the ability of water supply schemes to deliver water to meet demands, especially in the dry periods.
- 3. Increasing the fuel load that can burn, thus leading to greater fire intensity and over-frequent fires which, in turn, lead to physical damage of the soil, accelerated erosion, and reduction in the viability of indigenous seeds, thereby favouring recruitment of even more invasive alien plants.
- 4. Densely invaded areas become impenetrable, restricting access and making fires more difficult to control.

## Removal of invader plants

All alien or invader plant species must be removed. They compete with endemic vegetation for water, nutrition and soil, and therefore are a threat to the endemics. Undesirable species which may look harmless or even decorative include *Myoporum tenuifolium* ("Manatoka") and *Pennisetum clandestinu* ("Kikuyu").

Manatoka grows fast, and much higher than fynbos. It develops lots of seeds, which are often dispersed by birds. The plant shoots from the base, therefore chopping off the main stem is not very helpful. To avoid the use of poison, the plant needs to be cut off at root level. If it is cut above soil level, a herbicide needs to be applied otherwise it will vigorously re-shoot. It makes good firewood.

Small saplings of any species are easily removed with a Tree Popper. If the soil is not too dry it will cope with stems up to 2 cm diameter.

Obtainable through Terry Negus 021-858-1563 or 083-302-1640.

Kikuyu can be removed by treatment with Round Up, but without extremely careful application it can damage neighbouring plants. It is better to use an organic herbicide such as Ecoguard's "Mamba". To avoid damage to indigenous or other desirable vegetation, herbicides should be selected that will have the least effect on non-target vegetation (Contact Ecoguard for advice, ph: 021-862 8457). Once the grass is dead it can easily be removed by hand. Small areas can be cleared by pulling it out, but this is time consuming and may not be effective if bits of root are left behind also, soil loosened by pulling-out gives opportunities for unwanted seeds to germinate.

## General advice

When removing trees, make sure to cut them at root level, otherwise most plants will re-shoot. If the plant is still small, physically pulling it out complete with roots is the most effective method. Should herbicide be used on stumps, make sure of both correct dosage and method of application.

Do not use any herbicide that is not legally registered (as stated formally on the labeling). Follow the instructions exactly, especially for correct application frequency; avoid spillage, and if using a spray, do the job ONLY in calm conditions. Also make sure the correct active ingredient is used for specific plants; use that product only on the problem plants.

Remove weeds in their early stages, before they flower and spread their seeds to create a bigger problem. Alien plants and weeds that have been removed should be dumped or burnt so that they cannot re-sprout, nor allow included seeds to germinate.

Alien species with the ability to produce large numbers of seeds form dense stands and spread rapidly. Alien invaders consequently become established in fynbos, displace the native plants and reduce animal diversity. They also out-compete the natural vegetation, increase fire and erosion risk, and use much more water than indigenous plants.

In terms of the promulgated Regulations 15 and 16 of the Conservation of Agricultural Resources Act, no 43 of 1983 (CARA), landowners are legally responsible for the control of invading alien plants on their properties. Since these plants are spreading at an alarming rate, it is important for landowners to become aware of which plants are on the list of declared weeds and invader species. Misty Cliff's alien invader species especially to be removed include:

Acacia cyclops (Rooikrans) – Category 2. Acacia saligna (Port Jackson) – Category 1. Myoporum tenuifolium (Manatoka) – Category 3. Pennisetum clandestinum (Kikuyu grass).

#### **Control Tactics**

Prioritize areas to be controlled; those requiring follow-up treatment take precedence over areas that still require initial clearing. Follow-up treatment is essential to curb the further growth and spread of the alien vegetation, which has already had time and money spent on it.

Start with young less-dense trees to arrest the invasion and prevent the build-up of seed banks.

Starting in this way requires fewer resources and makes it easier to carry out follow-up treatment.

Dense mature stands should preferably be left for last, as they most probably will not increase in density or pose a greater threat than they are already.

Starting on clear dense areas also means that you have to be dedicated to expensive follow-up treatments thereafter.

Always consider the natural gradient of the area being cleared, all operations should follow the gradients of the slope and drainage lines.

The role of fire should be considered in alien clearing operations, but should never be attempted without prior consultation with and permission from the local authority.

#### Restoration

On larger properties clearing operations result in large exposed areas and so restoration should be considered. The primary goal is to re-establish a structurally representative stand of indigenous vegetation that fulfils the major ecosystem functions. Alien plant eradication projects are an integral part of restoration, and *vice versa*. Provided that no other disturbance has affected the area, light to moderately dense alien plant stands can be cleared without negatively affecting indigenous vegetation recovery.

Aim to conserve what remains; try to minimise the loss of indigenous seed banks and soil, thereby keeping restoration costs to a minimum. Prioritise areas requiring post-clearance restoration action as resources are usually limited. Areas prone to further degradation should be prioritised.

Any restoration programme should go through the following processes: Site assessment, planning, operation, and monitoring. Keep records of all invaded sites being restored. Records should include alien vegetation clearance methods and dates, restoration actions, and results of alien and indigenous vegetation monitoring. During site assessment of the main characteristics, be alert to rare species and keystone species.

Do not use commercially available seed as it may include some other undesirable seed, which may compete with the survival rate of fynbos seedlings. "Clean" seed sources can be advised by Kirstenbosch. Avoid using material from other areas as mixing of varieties can occur.

Flower heads and mulch can be collected from surrounding areas and spread over the area. As a general guideline, at least one flower head (with seeds!) to each square metre is required, with mixed mulch spread around thinly.

#### 4.3 FAUNA MANAGEMENT AND CONSERVATION

Table Mountain National Park (TMNP) is well known for its richness in terms of high levels of biodiversity and endemic species. Misty Cliffs village is within this jewel, therefore one can naturally expect to find indigenous wildlife in the Village. The undisturbed area surrounding the Village contains Mountain Fynbos and Strandveld Thicket vegetation types, both types playing a major role in the species diversity of the Park and support of its endemic fauna and flora.

Wildlife survival is dependent on various natural factors, such as food and habitat availability, natural competition, predation, vegetation, and climate. Human influence also plays a major role in wildlife survival, more especially since the rapid increase in urbanisation. In order to encourage and conserve wildlife in the urban environment, human impact has to be limited, for example, by ensuring that no further developments take place on the mountain range / slopes above the existing properties. Planting natural (indigenous) plant species in the gardens and ensuring that natural materials such as rocks, soil and plants are not removed unnecessarily from sites, can also assist in wildlife survival, as they provide habitat for indigenous or even endemic animal species.

Misty Cliffs Village is a low density, modern residential area, facing slopes consisting of pristine Mountain Fynbos, and therefore has the potential of supporting a limited population of mammals, more especially small antelope. The village area is known to currently support healthy birdlife populations.

## **Small Animals**

According to the SANParks website, some of the small mammals that can be sighted within the Misty Cliffs area are: *Caracal caracal* (Caracal or Rooikat), *Vulpes chama* (Cape fox), Hystrix *africaeaustralis* (Porcupine) and Klipspringer. The latter antelope species, although historically found in the area, was recently reintroduced to the TMNP, and individual animals have already been seen in the Village - an excellent indication.

Klipspringers are secretive and selective feeders. They can be encouraged by ensuring that their preferred food source is available. This can potentially be achieved by ensuring that palatable shrubs such as *Chrydamoides molifera* and *Rhus glauca* are planted in the area. These plants, particularly *Rhus glauca* are also useful for stabilising dunes in the area to prevent wind erosion, which is not only detrimental to the natural landscape, but also a major problem for built properties. *Rhus glauca* also serves as a favoured host of the natural parasitic plant mistletoe *Vuscum capensis*. Palgraves. K.C. 2002. and Bothma. J, 2002, both indicate that Vuscum and Euphorbia spp are among the most favoured food sources for Klipspringers and thus the presence of *R. glauca* could provide a valuable food source not only through being palatable itself, but also through supporting other important palatable parasitic species.

## Larger animals

Chacma baboons are the only large mammal species that may occupy the Misty Cliffs Village mountains. These social animals are commonly sighted close to residences when scavenging for food, therefore residents should refrain from feeding them and beware of leaving doors or windows open. Once habituated to human areas and food, raiding, aggression, and damage to properties may result.

#### **Insects**

Insects play a major role in the healthy functioning of a natural ecosystem and belong to the most abundant sector of organisms on the planet. They are therefore of extreme importance to any natural ecosystem as they provide many vital services such as being a major food source for most birds and reptiles, and being responsible for the pollination of the majority of plant species.

Many endemic plant species have co-adapted with endemic insect pollinator species, therefore the loss of an endemic insect species can consequently mean the loss of interdependent plant species. For example, the Mountain Pride Butterfly (*Aeropetes tulbaghia*) pollinates only a small variety of red plants (*Crassula coccinea*), Red Crassula and *Disa uniflora* (Red Disa). The residents of Misty Cliffs can grow one or more of these plants in their gardens to attract these special butterflies which play a role in the conservation of those colourful plants. Some of the butterflies' survival also depends on certain plant species for food, such as the Garden Acreae (*Acrea horta*), where the larvae feed on Wild Peach trees (*Kiggelaria africana*). The absence of these trees could result in the extinction of this particular butterfly in the area. Having these tree species in the surrounding areas not only saves the butterflies but is also important for reducing the intensity of wild fires in that they are evergreen, and therefore less flammable

## **Exotic Animal Management**

Cats, dogs and other domestic animals / pets should remain on an owner's property at all times. Cats are predatory by nature, no matter how well fed, and can kill off endemic fauna at an alarming rate. Domestic animals should not be allowed to roam around the pristine areas, and when taken for walks should be kept on a leash to prevent them from harming or being harmed by wild animals in case they come into contact. Domesticated birds should be kept in a closed environment or restricted to private properties, where they can be fed and not out-compete the indigenous fauna for food and habitat. Certain animals (including birds) which may seem harmless are nevertheless officially classified as exotic and the owners are required to obtain a permit for them, even if they are confined.

#### **Some recommendations**

Misty Cliffs residents have the privilege of being adjacent to a World Heritage Site, the TMNP. Living close to a natural area is not only a privilege but also a responsibility, namely, one needs to respect nature and wild animals in order to ensure that the environment will be preserved and conserved for future generations. It is highly recommended that it be enforced / stipulated that all residents plant only recommended plant species. For example, endemic Ericoid spp such as *Erica cerinthoides* and *E. mimosa* are colourful, fast growing plants that are pollinated by malachite sunbirds; therefore having natural Ericoid spp. in the garden will attract beautiful birds. Having indigenous plants not only helps to bring wildlife closer to your home, but also helps to save water because most fynbos plant species are morphologically modified to survive in poor / low water areas. Being well adapted to harsh conditions (pioneer plants), fynbos plant species are also relatively easy garden plants to maintain.

Feeding of wild animals should be prohibited and residents should be advised not to regard these animals as pets. Residents should remain on the demarcated footpaths when taking walks around the Village and mountain slopes. Baboon-proof bins should be the only type used. It is highly recommended that picnic areas and foot paths / walkways should be provided with baboon-proof bins in order to save cost on maintenance and vandalism. Indigenous flower picking should not be encouraged.

## 4.4 SOFT LANDSCAPING GUIDELINES

The general aim is to rehabilitate the area to preserve and protect the unique qualities of the existing landscape. This involves re-introducing plant species that are indigenous and endemic to the area such as fynbos. This also aims to create a better public awareness of plants, their function, and their maintenance. A background aim is to re-create a habitat and provide opportunities for endemic fauna to re-establish themselves towards recovering the situation that existed before human interference.

## Suitability of plant material for the microclimate

## Considerations:

- Ability to thrive in nutrient-poor and acidic sandy soils.
- Ability to withstand salt-laden air and sea spray.
- Tolerance of hot, dry summers and cold, wet winters.
- Tolerance of strong SE summer and NW winter winds.
- Resistance to diseases and pests.

## Functional uses of plant material

Plants can play an important role in a landscape and help to perform various functions which aim to create a better awareness of its usage and its positioning.

## **Aesthetics**

- Seasonal attributes.
- Growth rate.
- Density of foliage.
- Texture.
- Colour.
- Structure and scale at maturity.
- Attracting of birds and animals.
- Fragrance.

## **Engineering**

- Erosion control.
- Air conditioning.
- Traffic control.
- Acoustic control.
- Glare and reflection reduction.

## **Architectural**

- Screening.
- Space articulation.
- Privacy control.
- View articulation.

## **Climate Control**

- Wind control (obstruction, filtration, deflection and guidance).
- Sun control (filtration, radiation obstruction).
- Precipitation and humidity (rain, hail, evaporation, dew).
- Temperature (ground, air, seasonal).

## **Ideas for Plant Groupings**

- Planting in groups of odd numbers (3, 5, 7 etc) helps towards a better effect.
- Make use of colour, texture, and seasonal attributes and growth habits to create a year-round effect.
- Select plants with similar water requirements.
- Create focal areas and then attempt to fill in to form a uniform effect.
- Blend in with natural vegetation to create uniformity and to soften the harshness of buildings.

- Use natural anti-erosion tactics, e.g. groundcovers.
- Create different levels with surrounding rock matter to blend and lessen erosion as well as maintaining the contours within the area

## Method of planting

- Choose the most suitable location for the plant.
- According to the bag / container size, make sure the plant hole is big enough and that the plant fits comfortably.
- Always apply fertilizer to the hole before planting, usually about a handful per hole.
- Mix compost and fertilizers well into soil in the hole to avoid "burning" the plant by direct contact
- Remove plant from bag / container before planting.
- Always ensure that the root ball is intact; if necessary loosen the roots.
- Do not put plants in too deeply. Make sure when planting that the plant is at its original stem level. Planting too deeply may kill the plant, or retard its development.
- When planting fynbos consider using acidic compost rather than normal compost. Backfill soil into the hole around the plant to create a well, ensuring that the original height on the stem is maintained.
- Stake trees with two poles, placed securely in the soil next to the tree, one on each side, and before planting (never drive poles / stakes through the newly planted root ball!). Tie the tree to poles by using wire and hosepipe or tree ties. Water well after planting to penetrate through to the root zone. Transfer excess soil to where useful elsewhere.

## 4.5 FERTILISERS

Fertilisers encourage plant growth, health and longevity, but it is recommended to fertilise at a controlled rate. Applying too much too soon can be harmful, especially for fynbos, which is adapted to thrive on poor soils. Fynbos will grow too rapidly if over-fertilised and will then not be hardy.

One can use the proprietary Bounce Back or Pop-Up, but strictly at the recommended dosage or less. Organic fertiliser is also suitable but slower in effect. Over a period alternate fertiliser types to allow varied nutrient uptake through the plant's life cycle. Compost helps to create a more fertile soil, and creates a good plant medium for encouraging plant growth and development.

"N:P:K" on labels and references means a combination of compounds supplying nitrogen, phosphorus and potassium. Nitrogen promotes plant / leaf greening, phosphorus promotes root growth, and potassium promotes flower and fruit formation.

## 4.6 WATERING

Watering is essential but over-watering may cause water-logging, which depletes the root zone of oxygen and thus suffocates the plants. Under-watering causes distress and plants will tend to wilt and die back. Regularity is as important as quantity. Avoid planting thirsty species next to species needing less water, and take account of the season as well.

Water well once off, to ensure water penetrates the root zone, rather than watering more frequently and only the surface being dampened. Ensure sufficient watering of new plants to aid in initial root growth, then attempt to decrease the quantity as the plant becomes more adapted to its new conditions.

Water-wise plants DO require water, but not as much as plants which are not water-wise. When watering, do it before 10am or after 5pm, to avoid excessive water loss by evaporation. Use a watering apparatus, e.g. sprinkler, to break the flow / force of water before it reaches the plant, and to prevent leaching and soil erosion. Mulching with bark chips, coarse compost, etc.) helps to decrease the rate of evaporation.

If you have an irrigation system (strongly recommended for establishing new gardens) using a programmable timer (not expensive) and fitting a rain-sensor so that the timer is over-ruled during wet weather can save you a lot on water bills. Irrigation (and pool) timers should be checked weekly in case unnoticed electricity outages having disturbed the settings. The use of grey water (e.g., siphoned out of your bath) can reduce water wastage, but do not continually water plants with household detergent such as from washing machines. Minimise backwash or overflow water from salt-water pools getting to plant roots, especially indigenous species; salty soil will kill many fynbos species.

## 4.7 PESTICIDES

The use of chemical pesticides, ground poisons, and animal traps is strictly prohibited on any area of Misty Cliffs. If pesticides seem necessary, consult your nearest nursery with a possible sample of the problem. Organic sprays / solutions are the best options in this highly sensitive area. Organic solutions contain less-harmful ingredients and break down easier causing fewer disturbances to the environment and its ecosystem. Also aim to consider IPM (Integrated Pest Management) where a variety of techniques for possible solutions are used - consult your nursery for advice.

## 4.8 LANDSCAPING OF PRIVATE GARDENS

Planting of residential gardens should aim to blend in with the rest of the landscape. Plants chosen should be indigenous, preferably endemic. Residents are advised to consult their local nurseries and experts on which plants to use. It is advisable to restrain from planting exotics such as palms, lavenders, hibiscus etc as these do not fit in with the local unique picture and essence of a fynbos environment.

Planning of the landscape must take into account:

- The stringently enforced municipal regulation that requires vegetation to be frequently cut low during the fire season to prevent flare-ups from wind-borne burning material.
- All grading and terracing.
- All "hard landscaping" (see page 12).
- Water features, swimming pools and pumps.
- Exterior and landscape lighting.

All these points may need to conform with or adapt to the landscaped style of a larger project. Please note: Any landscaping company or gardening service engaged by a homeowner needs written authorization from the MCVA before beginning their work.

If all homeowners do their best to recreate the unique flora of the area it will enable the whole Village to look floristically consistent and compatible with the surrounding natural landscape.

## 4.9 MAINTENANCE RECOMMENDATIONS

Maintenance of the road reserve is the City's responsibility but in the community's interest the MCVA undertakes a certain amount of "gardening" by control of aliens and planting with local indigenous species.

For garden maintenance it is advised to incorporate organic materials, trim back old, dead, straggly, and over-grown branches, keep groundcovers within specified areas, and ensure weed removal (as far as possible not by herbicides) to help encourage growth of desired plant matter. Stake or re-tie plants that are being unduly wind-battered.

Trim back shrubs after flowering, and trim some shrubs regularly to create a bushy effect rather than a tall spindly plant which is vulnerable to strong winds. Check plants regularly for pests; correctly identify pests before selecting a species-specific pesticide.

## 4.10 RECOMMENDED TREE TYPES

All the trees listed below are indigenous to the Cape Peninsula but not necessarily suited to Misty Cliffs. However, most trees will thrive if given access to water and protection from fire. Some species do not cope with coastal conditions (wind exposure and/or alkaline sands). Tree sizes represent maximum height growth and are: 2-5 m = small, 5-10 m = medium, and >10 m = tall.

The following species need sun but are not happy in highly wind-exposed positions or in alkaline sandy soils.

Latin name	Common name	Size
Brachylaena neriifolia	Cape silver oak.	Small
Canthium inerme	Cape date.	Medium
Diospyros whyteana	Wild coffee.	Medium.
Grewia occidentalis	Cross-berry raisin.	Medium
Gymnosporia buxifolia	Common spikethorn.	Small
Halleria lucida	Tree fuschia.	Medium
Hartogiella schinoides	Spoonwood.	Medium
Kiggelaria africana	Wild peach (E); Wildeperske (A);	Medium
	Umkokoko (X).	
Leucadendron argenteum	Silver tree (E), Witteboom, Silwerboom	Medium
	(A).	
Leucospermum	Tree pincushion (E); Kreupelbos (A).	Small
conocarpodendron		
Maytenus oleoides	Rock false candlewood.	Small
Olea capensis subsp. acrocarpa	Ironwood.	Tall
Protea nitida	Wagontree.	Small
Rhus lucida	Waxy currant bush.	Small
Salix hirsuta	Cape willow.	Small
Virgilia oroboides	Keurboom (E and A).	Medium
Widdringtonia nodiflora	Mountain cypress.	Small

The next list suggests tree species likely to do satisfactorily in very exposed conditions and / or alkaline sandy soils:

Latin name	Common name	Size
Robsonodendron maritima	Coastal silky bark.	Small
Chrysanthemoides monilifera	Bietou (E and A).	Small
Euclea racemosa	Sea guarrie.	Small
Olea eurppaea subsp. africana	Wild olive.	Small
Pterocelastrus tricuspidatus	Candlewood.	Medium
Rhus glauca	Blue kuni-rhus (E and A)	Small
Rhus laevigata	Dune currant-rhus. (E and A).	Small

Sideroxylon inerme	White milkwood (E); Witmelkhout,	Small
	Melkhoutboom, Melkbessie (A);	
	Amasethole, Umqwashu (X); Amasethole-	
	amhlope, Umakhwela-fingqane (Z).	
Tarchonanthus camphorates	Camphor bush.	Small

## 4.11 RECOMMENDED SHRUB TYPES

In practice there is not a clear distinction between small trees and shrubs. A particular shrub may do so well that it looks more like a tree, and a specimen that should be a tree may remain somewhat stunted and resemble a shrub.

The following shrub species are all indigenous to the Cape Peninsula but for the particular micro-climate of Misty Cliffs it is advisable to double check proposed species with a local horticulturist or garden shop.

Latin name	Common name
Agathosma ciliaris	Hairy-leaved buchu (E); Bergboegoe (A).
Agathosma glabrata	Buchu (E); Boegoe (A).
Aloe maculata	Bontalwyn, Seepalwyn (A).
Aloe succotrina	Fynbos aloe (E & A).
Anaxeton leave	
Anisodontea scabrosa	Wild or Cape Mallow, Dwarf Hibiscus (E); Kusaandroos (A).
Athanasia parviflora (now revised to)	Coulter-bush (E); Koulterbos, Pôbos, Pokbos
Hymenolepis parviflora	(A).
Berzelia lanuginosa	Vleiknopbos, Vleikolkol (A).
Buddleja salviifolia	Sagewood (E).
Chondropetalum tectorum (now revised to Elegia tectorum)	Cape thatching reed (E); Dakriet (A).
Chrysanthemoides incana	Grysbitou (A).
Chrysanthemoides monilifera	Tick berry, Boneseed (E), Bietou,
	Bosluisbessie, Weskusbietou (A).
Cliffortia odorata	Wildewingerd (A).
Coleonema album	Cape may, White confetti bush (E); Aasbossie,
	klipboegoe (A).
Cussonia thyrsiflora	Cape coast cabbage tree (E); Kaapse
	kuskiepersol (A).
Cyperus textilis	Mat sedge, Umbrella sedge, Basket grass,
	Rushes, Emezi grass (E); Matjiesgoed,
	Kooigoed, (A); Imisi (X).
Elegia tectorum	Cape thatching reed (E), Dakriet (A).
Eriocephalus africanus	Wild rosemary.
Leucospermum cordifolium	Pincushion (E), Bobbejaanklou, Luisiesboom,
	Luisiesbos (A).

Euryops pectinatus	Golden euryops, Golden daisy bush (E); Wolharpuisbos (A).
Felicia aethiopica	Wild aster, Dwarf felicia (E); Wilde-aster, Bloublombossie (A).
Felicia filifolia	Fine-leaved felicia, wild aster (E); Draaibos (A).
Gnidia squarrosa	Aandbossie, Juffertjie-roer-by-die nag (A).
Grewia occidentalis	Cross Berry, Four-corner (E); Kruisbessie (A); Ilalanyathi (Z), Umnqabaza (X).
Gymnosporia buxifolia	Spikethorn.
Helichrysum cymosum	Gold carpet (A); Goue tapyt (A).
Helichrysum dasyanthum	Kooigoed (A).
Helichrysum teretifolium	Dune scrub, Everlasting.
Hymenolepis parviflora	Coulter-bush (E); Koulterbos, Pôbos, Pokbos (A).
Leonotus leonurus	Wild dagga, Lion's ear (E); Wildedagga, Duiwelstabak (A), Imvovo (X).
Leucadendron coniferum	Dune conebush.
Leucadendron laureolum	Golden conebush.
Leucadendron salignum	Sunshine conebush.
Leucadendron xanthoconus	Sickle-leaf conebush (E); Blinkblaartolbos (A).
Leucospermum conocarpodendron	Grey tree pincushion (E); Vaalkreupelhout, goudsboom (A).
Leucospermum tottum	Ribbon pincushion.
Lobostemon fruticosus	Pajama bush (E); Agtdaegeneesbos,
	Douwurmbos, Luibos, Lobos (A).
Metalasia muricata	White bristle bush (E); Blombos,
	Witsteekbossie, Steekbos (A).
Nylandtia spinosa	Tortoise berry (E); Skilpadbessie (A).
Orbea variegata	Carrion flower (E); Aasblom, Bokhoring (A).
Orphium frutescens	Sea-rose, Sticky flower (E); Teringbos (A).
Phylica buxifolia	Box phylica (E); Bukshardeblaar (A).
Phylica ericoides	Heath phylica, Ericoid phylica (E); Hardebos (A). In the cut flower trade it is sold as "Cape green" or "White phylica" (to distinguish it from <i>P. pubescens</i> which is called "Green phylica".
Podranea ricasoliana	Port St Johns creeper, Pink trumpet Vine (E); Port St Johns-klimop (A), Probably not indigenous.
Polygala myrtifolia	September bush (E); Augustusbossie, Blouertjie, Langelede (A).
Protea cynaroides	King protea.
Protea grandiceps	Red sugarbush (rare).
Protea magnifica	Queen sugarbush.
Protea repens	Common sugarbush.

Protea scolymocephala	Thistle protea, Thistle sugarbush, Small green protea, Scoly (E); Kleingroenroos, Witskollie (A).
Psoralea pinnata	Fountain bush (E); Fonteinbos, Bloukeur, Penwortel (A); umHlonishwa (Z).
Psoralea repens	
Pterocelastrus tricuspidatus	Candlewood, Cherrywood (E); Kershout, Kersiehout, Rooikersiehout, Witpeer, Witpeerhout (A); Ibholo, Itywina, Utwina (X).
Putterlickia pyracantha	Basterpendoring (A).
Rapanea melanophloeos	Cape beech (E); Kaapse boekenhout, boekenhout (A); Isicalabi, Umaphipha, Ikhubalwane, Isiqalaba sehlati (Z); Isiqwane sehlati (X).
Rhus (now Searsia) crenata	Glossy currant, Dune crow-berry (E); Rosyntjiebos (A).
Rhus (now Searsia) glauca	Blue kuni bush (E); Kroestaaibos, Taaiblaar (A).
Rhus (now Searsia) laevigata	Dune currant (E); Ranktaaibos, Dune taaibos (A).
Rhus(now Searsia) lucida	Wild currant, Glossy currant (E); Besembos (A).
Salvia africana caerulea	Blue sage, Wild sage, African sage, Purple sage (E); Blousalie, Bloublomsalie, Afrikaansesalie, Perdesalie, Wildesalie (A).
Salvia africana lutea	Beach salvia, Dune salvia, Golden salvia (E); Bruin (of) sand-salie, Geelblomsalie (A).
Salvia chamelaeagna	Rough blue sage (E); Bloublomsalie (A).
Salvia lanceolata	Rusty sage, Lance-leaf sage (E); Rooisalie (A).
Tarchonanthus camphorates	Camphor bush (E), Wildekanferbos (A), Igqeba emlimhlophe (Z).
Tarchonanthus littoralis (Cape Peninsula	Coastal camphor bush (E); Kuskanferbos (A);
variety of <i>T. camphorates</i> )	Isiduli selindle (X); Igqeba-elimhlophe, Isidulu-sehlathi (Z).
Thamnochortus spicigerus	Thatching reed (E); Olifantsriet, Dekriet (A).
Tecoma capensis	Cape honeysuckle (E), Umsilingi (X).

## 4.12 GROUNDCOVERS, BULBS AND PERENNIALS

Latin name	Common name
Agapanthus africanus	Fynbos agapanthus.
Amaryllis belladonna belladonna	Lily, March lily, Naked lady.
Arctotis auriculata	African daisy.
Arctotis stoechadifolia	Silver arctotis (E); Kusgousblom (A).
Aristea major (now Aristea capitata)	Blue sceptre (E); Blousuurkanol (A).

Asparagus capensis	Katdoring, Wag-'n-bietjie, Wilde aspersie (A).
Bulbine frutescens	Snake flower, Cat's tail, Burn jelly plant (E);
	Balsem kopieva, Geelkatstert (A).
Carpobrotus sp. edulis	Sour fig, Cape fig, Hottentots fig (E);
•	Ghaukum, Ghoenavy, Hottentotsvy, Kaapsevy,
	Perdevy, Rankvy, Suurvy (A); ikhambi-
	lamabulawo, umgongozi (Z).
Chasmanthe floribunda	Cobra lily (E); Kapelpypie, Suurkanolpypie
-	(A).
Cliffortia ferruginea	"Sandy Bay" (E); Glastee, Pypsteelbos,
	Teringtee (A).
Conicosia pugioniformis	Varkslaai, Gansie (A).
Cotyledon orbiculata	Pig's ear (E); Plakkie, Platjies, Varkoorblare,
	Varkoor, Kouterie (A).
Crassula coccinea	Red crassula (E); Klipblom (A).
Crassula pellucida	Carpet Crassula (E).
Dimorphotheca fruticosa	Dune creeping daisy (E); Rankmargriet (A).
Drosanthemum speciosum	Worcester-Robertson vygie, Red ice-plant (E);
	Berg vygie (A).
Gazania krebsiana	Terracotta gazania (E); Gousblom, Botterblom,
	Rooi gazania (A).
Geranium incanum	Carpet Geranium (E); Horlosies, Vrouetee,
	Bergtee (A).
Helichrysum cymosum subsp. cymosum	Gold Carpet (E); Goue tapyt (A).
Lampranthus coccineus	Red vygie (E,A).
Lampranthus glaucus	
Lampranthus multiradiatus	Roosvygie E,A).
Lobelia anceps	
Lobelia pinifolia	
Osteospermum fruticosum (= Dimorphotheca	Dune creeping daisy (E); Rankmargriet (A).
fruticosa)	
Otholobium virgatum	Agtdaegeneesbos (A).
Pelargonium betulinum	Birch-leaved pelargonium, Camphor-scented
	pelargonium (E); Maagpynbossie, Suurbos,
	Kanferblaar (A).
Pelargonium capitatum	Rose-scented pelargonium (E); Kusmalva (A).
Pelargonium peltatum	Ivy-leaved pelargonium, Ivy-leaved geranium,
	Cascading geranium (E); Kolsuring (A).
Senecio halimifolius	Wildetabak, Tabakbos (A). (May be an
	introduced species.)
Sutera hispida	Skunkbush (E, A).
Wachendorfia thyrsiflora	Bloodroot (E); Rooikanol (A).
Watsonia tabularis	Table Mountain Watsonia (E, A).
Zantedeschia aethiopica	White/common Arum lily (E); Wit varkoor
	(A); Intebe (X) Ihlukwe (Z).

Zygophyllum flexuosum	Caper beans, Dollar bush (E); Spekbos,
	Vaalkareedoring, Witkriedoring (A).

## 4.13 CLIMBERS AND CREEPERS

Latin name	Common name
Rhoicissus tridentata or Rhoicissus tomentosa	Wild grape, Bush grape, African grape, Forest
	Grape, Monkey rope, Wild vine (E); Bosdruif,
	Wildedruif, Bostou, Bobbejaantou (A);
	Isaqoni, Idiliya (X); Isinwazi (Z)

## 4.14 COMMENTS AND SUGGESTIONS

The Misty Cliffs Village Associations will always be pleased to receive constructive suggestions and comments (and probably some corrections) to do with these Guidelines and will strive to keep them up-to-date with changing circumstances and the regulatory environment.

## **ACKNOWLEDGEMENT**

The compilers of these Guidelines wish to thank their earlier counterparts in the Scarborough Ratepayers' Association for sharing their corresponding document, which provided the starting point from which the Misty Cliffs Guidelines evolved.

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