# **South Africa**

## Spring at the Cape

A Greentours Trip Report

7<sup>th</sup> to 22<sup>nd</sup> September 2019

Led by Paul Cardy and Seth Musker (days 1 to 4), Paul Cardy and Mayur Prag (days 5 to 13)

Daily Accounts and Systematic Lists by Paul Cardy

## Days 0 and 1 Saturday 7<sup>th</sup> and Sunday 8<sup>th</sup> September Arrival and Kirstenbosch

## (N.B. departure day from UK treated as 'Day 0' to maintain the day numbers used on checklists!)

Seth and I arrived early at the airport to sort various practicalities. Before leaving Pinelands we'd had great close views of Black Sparrowhawk over the guesthouse garden. The BA flight was on time, and once all assembled, and vehicle loaded, we drove the short distance to the leafy Cape Town suburb of Pinelands. We were immediately spotting common birds such as Egyptian Goose, Hadeda Ibis, Blacksmith Plover, and Hartlaub's Gull.

We were welcomed at our comfortable bed and breakfast where we settled into the excellent rooms. There followed a short break, with time to change and freshen up, but as there was so much to see we were keen to get into the field as soon as possible.

A short drive took us to Kirstenbosch Botanic Garden where we enjoyed an excellent and substantial lunch in the upper restaurant, at a cool table inside. The gardens were understandably very busy today, a Sunday, and the weather fine. I had been here the previous day and it was even busier, the temperature in Cape Town reaching an unseasonal 32 degrees. The adjacent bookshop had a good selection. *Neomuda* cicadas were a feature, calling in flight, and we even saw one land, its beautiful green colour giving it the name Cape Emerald.

Kirstenbosch is a fine botanic garden of global importance, the extensive planted areas boasting a wealth of native flora, and, in the upper part, native fynbos on the lower slopes of Table Mountain. A short visit can only scratch the surface, but we made the best of our time here. We strolled slowly upwards, admiring the fine plantings, with Table Mountain looming above, the lower slopes of fynbos not far from the upper edge of the gardens. *Histiopteris incisa* was our first fern, followed by naturalised *Nephrolepis cordifolia*. Carpenter Bees patrolled.

The gardens are a fine birdwatching site, and we had good views of Southern Double-collared Sunbird, Cape Robin-Chat, Cape White-eye, and Cape Spurfowl. Some were able to photograph Cape Sugarbird on *Leucospermum*. Forest Canary, Cape Batis, and Southern Boubou added to the variety.

*Oxalis purpurea* coloured areas of lawn pink, and *Oxalis incarnata* was seen too. The proteaceous tree *Brabejum stellatifolium* was in bloom. Planted King Protea was in fine flower and everyone took the opportunity to photograph the impressive blooms. Although we saw several plants of this species in the wild later in the tour, none were in flower this year.

Once in the fynbos we were faced with a wealth of plants, many belonging to families unfamiliar to European botanists. The pink flowered legume *Podalyria calyptrata* was in fine flower, as was *Virgilia oroboides*. Cape Sweet Pea *Dipogon lignosus, Indigofera filiformis,* and the tar scented *Bolusafra bituminosa* were among the other legumes. The anemone relative *Knowltonia vesicatoria* grew in the shade, and *Erica hirtiflora* was common in flower. Seth added *Erica mauritanica, Erica baccans,* and *Erica paniculata* to the *Erica* list. *Cunonia capensis* was of great interest as its only surviving relatives occur in New Caledonia.

The impressive feathery flowering heads of *Phylica pubescens* were admired, and *Geranium incanum* was in flower. Attractive Silver Trees dotted the hillside here and there, and representing the same family was Waboom, *Protea nitida*. Among the many other plants recorded were *Oftia africana, Struthiola ciliata, Osyris compressa, Podocarpus elongatus, and Asparagus rubicundus*. Among the varied shrubs and trees were *Canthium inerme, Clutea pulchella, Olea europaea africana, Searsia tomentosa, Cassine peragua, Gymnosporia buxifolia, Curtisia dentata, Maytenus oleoides, Myrica cordifolia, and Diospyros wighteana*. Pretty Lotononis umbellata was in flower. Ferns continued with Mohria *caffrorum, Pellaea pteroides, Asplenium aethiopicum, and Histiopteris incisa*.

*Viscum pauciflorum* parasitised the *Maytenus*, one tree especially laden with it, with few of its own leaves left. *Gnidia juniperifolia* had yellow flowers, and white flowered *Gnidia tomentosa* bloomed at the streamside. New last year had been *Linum quadrifolium* and I was pleased to find it again today, several plants, although all were in bud this year. *Aristea bakeri* in fruit was a feature and yellow flowered *Ochna serrulata* was naturalised. African Olive Pigeons were a feature today with several in flight and one seen perched in the open.

Weary after the flight and this very rewarding introduction to the wealth of wildlife here, we made our way back to the vehicles, and thence the guesthouse, preparing for dinner, which tonight was in the guesthouse itself. The food was excellent, and we looked forward to a fine tour.

## Day 2 Monday 9<sup>th</sup> September Cape Peninsula

After an excellent breakfast at the guesthouse we set out for a day on the peninsula.

The first stop, at the Observatory, not far from the hotel, was intended to target just one plant, the critically endangered *Moraea aristata*, this being the sole remaining site for it. Not only was the target *Moraea* in flower, but there were many other things of interest, not least more petaloid monocots. We were very privileged to be able to visit here.

As we walked towards the *Moraea aristata*, on the lawns were fine *Sparaxis grandiflora*, and there were several patches of *Lachenalia meriana*, the first of many of this genus we would see. The orange *Baeometra uniflora* and the blue *Geissorhiza aspera* were closed at this time of the morning. The *Moraea aristata* was not at its best this year, unusually, and we only found a couple still just in bloom. I relocated one patch of the lovely *Moraea vegeta* (the only place we saw it), it took some

finding today, again most being in fruit, but we did see a couple still in fine flower. There was also common Tulp, *Moraea miniata*. Weedy composites began with *Arctotheca calendula*, *Dimorphotheca pluvialis*, *Ursinia anthemoides*, and *Cotula turbinata*. *Oxalis pes-caprae* was familiar from the Mediterranean, where it is a serious weed. Superficially very similar but with flattened petioles was *Oxalis compressa*. Other European weeds included *Erodium moschatum*, *Trifolium dubium*, *Euphorbia helioscopia*, *Euphorbia peplus*, and *Euphorbia esula*. Among the other native species were *Asparagus scandens*, *Hermannia hyssopifolia*, and *Searsia lucida*. *Romulea rosea* flowered in the lawns, together with the very different small white-flowered form, var.australis. A small area of open water had White-faced Whistling Duck and Yellow-billed Duck.

Heading south on the Cape Peninsula, our next scheduled stop was at the African Penguin colony at Boulder's Beach. Here we walked a path that allowed us to get within inches of the penguins, allowing fine photographs. Several were close to the boardwalk, with several chicks, although there were fewer individuals seen today than is usual. This species is also known as Jackass Penguin due to its call, a regular soundtrack here. Rocks out to sea had Cape Cormorants, fewer White-breasted Cormorants, as well as Swift Tern, and Kelp Gulls much in evidence. Cape Robin Chat was active in the scrub and Rock Hyraxes were on the boulders. The vegetation featured *Rhus glauca* and *Lycium tomentosum*, and *Tarchonanthus camphoratus* flowered. Blue *Commelina benghalensis* bloomed in the shade. There were impressive Cape Lappet larvae, Cape Wagtail, and the pierid Common Dotted Border was flying. The attractive skipper Gold Spotted Sylph was admired. This year there was much *Cynanchum obtusifolium* twining on shrubs, in flower.

Further south along the impressive False Bay coast, the shrubby *Scabiosa africana* flowering on the roadsides, we reached Cape Point Reserve, boasting fine fynbos vegetation. Notable for me was the fact it was thirty years since I'd first reached Cape Point, then, in 1989, arrived at after seven months of fascinating adventures crossing Africa overland from the UK.

At the first stop in fine ericoid, proteoid, restioid fynbos were *Muraltia ericoides, Lobelia pinifolia, Crassula fascicularis, Adenandra uniflora, Adenandra villosa, Erica imbricata, Drosera trinervia, Penaea mucronata, Gnidia pinifolia,* and *Struthiola ciliata.* The Silky-puff, a small pink flowered protea, was very attractive. There was a fine selection of restios including *Elegia stipularis* (forming extensive stands), *Staberoha banksii, Hypodiscus aristatus, Mastersiella digitata,* and *Restio circinnatus.* Among the other heaths were *Erica coriifolia, Erica labialis, Erica muscosa, Erica ericoides* in leaf, *Erica cuspidata,* and *Erica tristis.* Several *Moraea neglecta* were in flower, dotted singly here and there in the veld.

At the next site was a wealth of different plants. The fynbos here had fine *Leucadendron salignum*, the very yellow *Leucadendron laureolum*, stunning *Serruria glomerata* and *Serruria villosa*, beautiful floriferous *Mimetes fimbriifolius*, and *Leucospermum conocarpodendron* became conspicuous. *Indigofera glomerata* and *Senecio elegans* were in flower and Southern Rock Agama and Cape Sand Lizard basked.

We reached a rocky coastal outlook where we ate lunch. Among the many plants were *Thesium viridifolium, Gymnodiscus capillaris, Asparagus lignosus,* and *Geissorhiza ovata*. Also here was the white flowered *Geissorhiza similis*. There was much of the rodent pollinated *Liparia parva* this year (pollinated by Striped Mouse). *Polygala bracteolata, Thesium viridifolium, Hebenstreitia repens, Staavia radiata,* and *Lyperia tristis* continued the variety.

Having appreciated the views at this, almost the southern most point of the continent (the southermost point is Cape Agulhas), we headed back into the fynbos. At the next site were *Saltera sarcocolla, Syncarpha speciosissima*, and *Aspalathus capensis* was in impressive flower, the first time we'd seen it on the tour. Next we wandered into a slightly marshy area to admire the beautiful *Mimetes hirtus*, with attendant Malachite Sunbirds. *Morella serrata* was added to the list. Also in this area was the yellow flowered *Aspalathus carnosa*, and we had good views of Bontebok beside the road.

Here was an extensive recent burn with *Gladiolus merianellus (bonaspei)* in fruit, last year we'd seen its beautiful tubular orange flowers, a species limited to the peninsula. *Watsonia coccinea* was admired and *Senecio rigidus* was a feature. Another stop was prompted by beautiful flowering mats of *Leucospermum hypophyllocarpodendron*.

At the coast we had close views of Ostrich, and Black Oystercatchers on the shore. In flower here were *Trachyandra ciliata, Euphorbia caput-medusae, Coleonema album, Ruschia sarmentosa, Thesium capitatum, Felicia fruticosa,* and *Pelargonium gibbosum* was in leaf. Angulate Tortoise moved through the vegetation.

We travelled back along the impressive and rugged west coast of the peninsula, the sun beginning to set over the waves, with striking cloud formations too. Back in Pinelands at dusk, at the end of a very productive day, we quickly prepared for dinner. This we ate in a restaurant nearby in the Howard Centre.

## Day 3 Tuesday 10<sup>th</sup> September West Coast, Darling Area, and to Langebaan

Today we left Pinelands, the weather fine, and headed for the west coast, north of Cape Town. Wetlands north of town had Black-winged Stilts, Greater Flamingos, and a selection of other waterbirds. The traffic was not heavy, and we made good progress to our first stop, near a filling station, where we saw much *Lachenalia pallida* in flower, and a selection of amaryllid leaves including those of *Brunsvigia orientalis* and *Crossyne guttata*. Alien weeds such as Purple Viper's Bugloss and *Trifolium hirtum* were a feature. Donkey Daisy Copper was on the wing and many Great White Pelicans were in the air.

At the next stop the fascinating *Babiana ringens* flowered commonly on one stretch of roadside. This is a remarkable plant, whose highly specialised structure has a modified sterile stem forming a central spike to serve as a perch for pollinating Malachite Sunbirds.

At this same stop were many other things of interest. Among the other petaloid monocots were *Wachendorfia multiflora, Gladiolus carinatus,* the orchid *Corycium orobanchoides,* and *Moraea minor.* Manuleaeoid Scrophulariaceae were well represented with at least *Nemesia affinis, Lyperia lychnidea, Manulea rubra, Hebenstreitia repens, Hebenstreitia robusta, Phyllopodium cephalophorum, Polycarena lilacina,* and *Hemimeris sabulosa. Cysticapnos vesicaria* was an interesting twining fumitory with small pink flowers and inflated pods, and the red tubular flowers of *Microloma sagittatum* were bird tongue pollinated. Also here were the brown flowered *Salvia lanceolata, Tetragonia fruticosa,* the orange flowered and strongly scented *Hermannia angustibracteata, Oxalis obtusa, Rumex lativalvis,* and the endemic *Ruschia indecora.* Both *Trachyandra hirsutiflora* and *Trachyandra revoluta* were in bloom. *Osteospermum clandestinum, Eriocephalus racemosus,* and *Muraltia spinosa* were among the shrubs. New last year had been *Aspalathus albens,* and several were again in flower. Fynbos Blue was on the wing.

As we drove onto Waylands Wild Flower Reserve, part of a farm set aside for its wealth of flowers, we knew we were in for a treat. Always a highlight, the flowers were simply stunning here this year. It's difficult to know how to express this fine floral show, but here are some of the highlights. Much *Moraea tripetala*, the inner tepals reduced almost to short hairs giving a three-petalled appearance; many of the purple and red *Geissorhiza radians*, and its co-mimic *Babiana rubrocyanea; Geissorhiza monanthos;* the large pink flowers of the leafy stemmed *Drosera cistiflora;* fine *Drosera pauciflora; Salvia africana-caerulea; Sparaxis bulbifera; Triglochin bulbosa; Lachenalia pallida; Moraea fugax* and the brick red and small flowered *Moraea gawleri; Albuca acuminata;* the flat to the ground umbellifer *Arctopus echinatus* with central spiny bracts; the shrubby borage *Lobostemon fruticosus; Trachyandra chlamydophylla* and *Trachyandra filiformis;* and *Lapeirousia jacquinii. Lachenalia unifolia* was added to the growing *Lachenalia* list.

There was so much going on that we hardly had a second to look at anything else, but Bokmakierie sang from atop bushes, and the satyrid Boland Brown was common here, a butterfly we would see at many sites during the tour. The plants continued with *Ursinia anthemoides*, *Aspalathus hispida*, fine *Spiloxene capensis*, *Pelargonium triste*, *Ixia maculata*, *Polygala recognita*, yellow flowered *Nemesia affinis*, *Melasphaerula ramosa*, and *Montinia caryphyllacea*. There were distinctive leaves of *Eriospermum capense*. Areas were turned blue with *Heliophila coronopifolia* and *Heliophila africana*.

Once through the small town of Darling we next visited another small flower reserve, Tienie Versveld, where Cloud Cisticola performed high aerial display flights. This reserve supports the only known population of *Geissorhiza darlingensis* which flowers a little later in the year. The showy *Ornithogalum thyrsoides* was much in evidence, *Babiana angustifolia* was admired, and *Spiloxene canaliculata* was another speciality of the area. *Indigofera procumbens* had attractive spikes of salmon flowers. *Romulea tabularis* was numerous, there was *Tulbaghia capensis*, and the yellow 'mesem' *Carpanthea pomeridiana* was in flower. Cape Teal, Three-banded Plover, Cape Longclaw, and Red-capped Lark were among the birds here.

Plants continued with *Trachyandra muricata*, *Hebenstreitia robusta*, *Chlorophytum undulatum*, *Ixia dubia*, and *Crotalaria excisa*.

Now heading purposefully for our accommodation in Langebaan we arrived at dusk and before dinner met for the serious task of the plant check list, held in the sitting area of the rooms that Seth and I were sharing. Seth then drove us to a good waterside restaurant for dinner.

### Day 4 Wednesday 11<sup>th</sup> September West Coast National Park

After enjoying a good breakfast we set out to explore the West Coast National Park. A short drive through Langebaan saw us arriving at the park's northern gate, fine views of Langebaan lagoon and the coast ahead. The park comprises Langebaan Lagoon, and the surrounding strandveld, and includes varied habitats such as coastal dunes, salt marsh, wetlands, and fynbos.

A stop was prompted by *Ferraria crispa* that I spotted as we drove. The strandveld vegetation here had much *Euphorbia mauritanica*, with its distinctive yellow bracts, and the tall yellow and green flowered *Albuca* here was *Albuca flaccida*. *Ornithoglossum viride* was a pleasing find, in fine flower and *Lebeckia sepiaria* was attractive. *Osteospermum dentatum* was new for the list. Cape Penduline Tit called and was seen briefly. Various lepidoptera larvae were abundant here, many of them spectacular, such as species numerous on Lycium tetrandrum, and a green and red butterfly larva on *Euclea*.

Our drive around the lagoon was punctuated by Ostrich sightings, fine close Black Harrier, and Black-winged Kite hovering. Further stops produced *Ballota africana*, *Stachys aethiopica*, *Stoibrax capense*, *Zaluzianskya villosa*, *Gazania pectinata*, and *Foveolina tenella*. *Viscum capense* parasitised *Euclea*. In the shade of shrubs grew the euphorbiaceous *Leidesia procumbens*.

Karoo Scrub Robin was much in evidence, and Pied Starling and Cape Bulbul were common. At a dune stop we saw superb *Grielum humifusum* on the roadsides (*Grielum grandiflorum* was seen today too). Also here were *Cotula duckittiae*, *Jordaaniella dubia*, a(nother) mystery *Heliophila*, and *Limeum africanum*. *Cynanchum africanum* was in flower.

At a coastal stop, the ocean lively, were *Atriplex cinerea*, *Roepera cordifolia*, and *Chenolea diffusa*. *Didelta carnosa* was in impressive flower on one slope. African Oystercatcher was on the rocks. It was very busy here today, even with several coaches. I was pleased that the small volunteer run bookshop here had re-opened since our last visit.

We reached the Postberg section of the park, open only in August and September. Here were a good selection of ungulates, but with a rather complex situation regarding which are native. Bontebok and Cape Mountain Zebras, both reintroduced but native to the area, grazed on the open grassland, as did Springbok, also native here.

On the Postberg the floral show this year was somewhat less impressive than it often is. The purple composite here was *Felicia tenella*, and there were also *Euphorbia burmannii*, *Roepera morgsana*, and abundant *Oncosiphon suffruticosum*.

Having reached the designated parking area where we were allowed to get out and wander around, it was already time for lunch, Hartlaub's Gull waiting expectantly near the cars. After lunch we set out on a short walk. The red *Pelargonium fulgidum* was striking, and there was *Pelargonium hirtum* too. *Trachyandra muricata, Asparagus capensis,* and *Drimia exuviata* were here, and *Chasmanthe floribunda* was in fruit. Among other species here were the pink flowered *Podalyria argentea, Nemesia affinis,* the small, orange flowered *Ornithogalum maculatum, Hemimeris sabulosa,* and *Muraltia harveyana.* Karoo Girdled Lizard and Cape Skink were seen well.

Plants continued with Moraea gawleri, Pharnaceum lanatum, Othonna cylindrica, Lampranthus aurantiacus, Muraltia macropetala. The ferns Cheilanthes hastata and Cheilanthes multifidus were identified.

*Crassula natans* bloomed in a small rock pool. The larvae of Cherry Spot moth was rather common and we would see them at a number of sites, feeding on *Albuca* and *Ornithogalum*. The attractive pale bee-fly here was *Australoechus hirtus* and Bladder Grasshopper was seen. Across the bay were

good views of Langebaan. A beautiful Brush Jewel Beetle, a Buprestid, a species of *Julodis*, metallic with tufts of yellow hairs on its elytra, was associated with *Lycium*.

Back around the lagoon, the next stop produced the diminutive *Ornithogalum multiflorum*, *Wurmbea spicata*, *Geissorhiza aspera*, *Crassula muscosa*, and *Chaenostoma uncinatum*. *Lachenalia rubida* had gone over. A group of Eland was below us on the slopes.

At the nearby bird hide were Kittlitz's Plovers, White-fronted Plover, and both Greater and Lesser Flamingos side by side very close to us. Beside the boardwalk bloomed the beautiful *Gladiolus orchidiflorus*, and *Otholobium bracteolatum*.

Later we continued the ever growing plant list before driving into town for dinner.

#### Day 5 Thursday 12<sup>th</sup> September Journey to Nieuwoudtville via Veldriff, Cedarberg, Knersvlakte and Van Rhyn's Pass

Today we said goodbye to Seth, and met Mayur, who would be with us for the rest of the tour.

We left Langebaan and embarked on the varied journey to Nieuwoudtville. Driving past the salt marshes at Veldriff we saw a selection of waterbirds, including both species of flamingo again.

We took the coast road north of Veldriff and then headed inland to the Cedarberg. Our first stop was to admire thousands of red *Babiana hirsuta* flowering in dunes. This was an incredible sight, one of the floral shows of the tour. Here too was much fine *Euphorbia caput-medusae*. There were many impressive *Brunsvigia orientalis* leaves, fine *Senecio elegans*, and *Ferraria densepunctulata* was in bud.

Verloren Vlei was, as it had been last year, completely dry. Here were *Ornithogalum suaveolens*, *Crassula subaphylla*, *Tylecodon wallichii*, and beautiful *Cyanella hyacinthoides*. There was a confusing variety of *Albuca* species! It was pleasing to find *Lachenalia hirta*, at the only site we have seen the species.

A scenic drive took us towards Clanwilliam. A roadside proved excellent with a great show of petaloid monocots. *Lapeirousia jacquinii* and *Sparaxis meterlekampiae* needed a keen eye to distinguish between the two, and what appeared to be the very local *Lachenalia glauca*, known from further north but also from one site in this area, was a good find. *Leucospermum loranthifolium* and *Leucospermum pubescens* were here and *Elegia macrocarpa* was added to the growing restio list.

We reached the N7 where we found a spot where we could get away from the highway, suitable for lunch. Here a colony of Southern Red Bishops caused much interest. A brush like asparagus here was identified as *Asparagus juniperoides*, although this occurs further north so this was a related species. *Moraea filicaulis* was in flower, and Fairy Flycatcher was in the scrub.

Later we made a fuel and supply stop, and before long we were in the arid landscape of the karoo, amid *Acacia karoo* scrub. We took a detour onto a side track late afternoon which allowed a taste of the fascinating vegetation of the Knervslakte. Our main target, the succulent 'babies bottoms', *Argyroderma delaeti* was numerous here, and we found several fine patches. *Pteronia glabrata* was

one of the few species in flower. Indeed as had been the case two years ago, there was almost nothing in flower, whereas last year the floral show had been very impressive with a palette of stunning colours provided by a fine mixture of composites and mesems.

Next we climbed the escarpment towards Vanrhyns Pass, seeing *Tylecodon paniculatus* and *Ficus cordata* on the slopes. A view stop allowed fine vistas in the late afternoon light, although cloudy today. Here was an initial taste of the floral wealth of the Nieuwoudtville area, among the many species were *Moraea brachygyne*, *Gnidia leipoldtii*, *Diascia whiteheadi*, *Alonsoa unilabiata* and *Crassula sebaeoides*. A pair of Verreaux's Eagles was overhead. A roadside with many pink flowered *Satyrium erectum* prompted a late afternoon stop, but heavy rain came necessitating a quick departure.

We reached the characterful town of Nieuwoudtville and from there took the dirt road south towards our home for the next three nights. We continued to the extensive farmstead and settled in to the very comfortable rooms before enjoying a raved about dinner of delicious lamb, with a fire roaring in the corner, and as usual good wine available.

## Day 6 Friday 13<sup>th</sup> September Nieuwoudtville – Papkuilsfontein and Hantam

An excellent breakfast was enjoyed. Karoo Thrush, Mountain Wheatear, and Greater-striped Swallows were among the conspicuous birds around the farm.

We initially travelled south to the neighbouring farm at Papkuilsfontein, where we checked in at the farmhouse for our visit to the nearby waterfall.

A lengthy adventurous track took us towards the waterfall where we parked, and a short rocky walk led us to the edge of the gorge and fine views of an impressive narrow waterfall tumbling into it. This was a remarkable landscape, but rather bare this year after a very extensive burn. After admiring the view we turned our attention to the plants, which were many and varied. *Felicia filifolia, Oedera squarrosa,* and the fumitory *Trigonocapnos lichtensteinii* were noted, and a highlight was the unusual *Whiteheadia bifolia*. Among the many other species here were *Lobostemon laevigatus, Arctotis revoluta, Crassula nudicaulis,* and *Crassula muscosa*. The shrub *Dodonaea angustifolia* was of interest as it has a widespread global distribution. Other shrubs included *Osyris compressa* and *Diospyros glabra*.

Plants continued with *Coleonema juniperinum*, *Nylandtia scoparia*, impressive *Dioscorea elephantipes* with its impressively large exposed armoured tuber, and *Ornithogalum maculatum*. *Lachenalia mutabilis* and *Nemesia cheiranthus* were here too and *Holothrix aspera* was in flower. Graceful Crag Lizard basked on rocks.

Nearby were specimens of the rosaceous tree *Cliffortia arborea*, a relict and now very scarce member of a large Cape genus. *Geissorhiza divaricata*, *Salvia dentata* and *Oxalis ambigua* continued the variety. The large *Aloe mitriformis* was in impressive flower and the fern *Cheilanthes capensis* was here.

Much interest was caused by the phenomenally tiny *Conophytum swanepoelianum* and the only slightly larger *Anacampseros retusa*, both only in leaf.

Nearby a three-year old burn site had surprisingly few flowers but a very spiny *Berkheya* featured. Avocet was a surprise, and there were Ludwig's Bustards, and we would see them in reasonable numbers over the next two days.

It was time to head purposefully nearer to town, and we reached Hantam Botanic Garden in time to eat our lunch on the lawn. As we approached we met a car whose occupants signalled to us that there was absolutely nothing in flower in Hantam, 'I bet there is' we said to each other, and of course we saw much today. OK, this year was not the superb floral wealth when it is at its best, but still there were many flowers. However, the bus tour around the reserve was not running this year. Two years ago this had been suspended as the whole area had been so incredibly dry, giving no indication of the usual floral profusion here. It was quite something to have seen it like this. The whole place had been deserted and the offices closed. We had parked at the upper car park, walked the dry velt, and even managed to reach the dolerite ridge on foot. There we had found a few of the usual specialities in ones and twos, but even here there were very few.

In 2018 it was back to 'normal', in fact more so, the floral show simply stunning, and probably the best we had ever seen it. But the old characterful bus had finally been retired and had been replaced by a smaller safari jeep. There had been just room for all of us to fit in, with me leading the tour, and at least none of us had to sit on the rather odd safari chair bolted to the front of the vehicle!

This year it was again very dry here, with the flowers far from their best, but it was certainly better than two years previously and our walk towards the dolerite yielded most of the expected species, although most in low numbers. The safari jeep tours were not currently running. So, after lunch eaten on the lawns by the park office, we parked in the upper car park and walked onto the extensive renosterveld. It has been calculated that up to 20,000 bulbs can occupy a square metre of ground here! A Brush Jewel Beetle started things off. The leafy stems of *Oxalis massoniana* were numerous. Amid robust tussocks of *Tenaxia stricta* there were fine *Sparaxis elegans*, *Moraea tripetala*, and a good number of beautiful *Geissorhiza splendidissima*. *Bulbinella elegans*, *Cyanella alba*, and a small white *Heliophila* were also in bloom, and *Diascia veronicoides* was numerous. *Babiana spathacea*, here in a distinctive colour form, possibly deserving full species status, was in flower for the first time on the tour.

Also seen were *Arctotis acaulis* and the thistle like *Berkheya glabrata*. On the dolerite flats were a few of the lovely *Hesperantha vaginata*, abundant in a better year. The endemic *Alonsoa unilabiata* was another highlight and there was a lone *Romulea monadelpha*, not seen by us for a few years on the tour. Common Quail was heard often around Nieuwoudtville. Among the many other species this afternoon were *Rhyncopsidium pumilum*, *Tenichroa filifolia*, *Diascia cardiosepala*, *Nemesia leipoldtii*, and *Moraea pritzeliana* in flower. Trimen's Brown was on the wing.

Back in our vehicles we headed towards the farm. A stop at a culvert yielded yet another *Lachenalia*, this one *Lachenalia alba*, also in fine form.

Back on the farm we found *Gladiolus uysiae* and *Moraea pritzeliana* in flower. We enjoyed another delicious dinner, later continuing with the checklists.

## Day 7 Saturday 14<sup>th</sup> September

## Nieuwoudtville – Quiver Tree Forest and Wild Flower Reserve

Today we travelled some way to the north of town, to the Quiver Tree or Kerkeboom Forest. In town a quick visit to the characterful filling station was as always an interesting experience.

The Quiver Tree is a species of *Aloe, Aloe dichotoma*, with a remarkably distinctive shape, forming a very sparse and open 'forest' on a dry rocky hillside, an atmospheric and beautiful place. However the Quiver Trees themselves appear to be suffering somewhat from the recent droughts. As we drove in a pair of Namaqua Sandgrouse were seen very well, a beautiful bird.

In this arid habitat flowers were few and far between but searching the slopes yielded a few interesting species. The Karoo Violet, *Aptosimum indivisum* was particularly attractive, and the spiny shrub *Monsonia crassicaule* was remarkable for being a geranium, the long stork's-bill pods showing its affinities. *Othonna quercifolia, Arctotis fastuosa, Rhyncopsidium pumilum, Osteospermum sinuatum, Gazania heterochaeta* and *Gazania lichtensteinii* were among the composites; the unusual *Codon royenii* represented the Boraginaceae; and *Euphorbia decussata, Malephora purpureocrocea*, and *Prenia pallens* were all here. *Jamesbrittenia thunbergii* was in flower.

To the north were fine views of a vast arid landscape. Western Rock Skinks scuttled for shade. Strangely the colony of Dassie Rats discovered on a previous visit here was not seen this year or the previous two.

Back towards town, we made a roadside stop that produced some fine plants. *Codon royenii* was again in flower as was *Prenia pallens*. *Forsskaolea candida*, belonging to the nettle family, grew at the roadside. *Leysera gnapthaloides* was among a number of composites, and the spiny *Pelargonium echinatum* was in flower. Yellow flowered *Lotononis leptoloba* was at the roadside, and *Lampranthus watermeyeri* was new for the list.

At the next stop was an *Indigofera* with very impressive pods. Tubular purple flowered *Peliostomum virgatum* was attractive. Here were many *Moraea aspera*, with spiralled leaves, although most were in fruit this year.

Sparaxis elegans in superb condition meant we just had to make an unscheduled stop to admire it.

At the next site the *Sparaxis tricolor* was superb and numerous, and here was *Moraea tripetala* again. Other petaloid monocots included the yellow *Babiana vanzyliae*; blue *Babiana sambucina*; *Hesperantha cucullata*; pink *Hesperantha pauciflora*; the blue spikes of *Ixia rapunculoides*; *Moraea vallisbelli*; *Bulbinella eburniflora*; and *Lapeirousia jacquinii*. The variety continued with *Asparagus ovatus*, *Ornithogalum polyphyllum*, *Gladiolus scullyi*, *Diascia whiteheadi*, and *Selago glabrata*.

The orchids here were the endemic *Corycium ingeanum*, very similar to *Corycium orobanchioides*. *Gazania rigida*, *Cotula microglossa*, *Cotula nudicaulis*, *Hebenstreitia parviflora*, *Hebenstreitia dentata*, and *Hemimeris sabulosa* were all seen too. Here we enjoyed lunch, somewhat delayed for some of us as there was so much to see. African Clouded Yellow was on the wing.

Next we walked a little further to a streamlet that supported a fine population of *Onixotis stricta*, a few *Spiloxene aquatica*, and pretty *Heliophila amplexicaulis*. Under the trees here were a number of the interesting 'stemless' orchid *Satyrium pumilum*, fly pollinated, and indeed flies were much in evidence around the plants.

Our last stop of the day was at the extensive Nieuwoudtville wild flower reserve, another great site, and superb today. The dolerite here supported *Hesperantha bachmannii*, *Ornithogalum suaveolens, Babiana framesii*, *Bulbinella elegans, Roepera foetida, Melianthus comosus, Stachys rugosa, Cotula microglossa, Diascia veronicoides, Hemimeris centrodes, Geissorhiza inaequalis* and *Thesium lineatum*. The Pineapple Lily, *Eucomis regia*, was a highlight and the local endemic *Zantedeschia odorata* was in flower. The urticaceous *Didymodoxa capensis* in the shade of rocks was new for the list.

*Cyanella lutea* was in fine flower, and the variety continued with *Microloma tenuifolium*, *Silene pilosellifolia*, *Solanum guineense*, *Pterygodium schelpei*, *Trigonocapnos lichtensteinii*, and *Pteronia glauca*. A few of the orchid *Pterygodium hallii*, with non-resupinate flowers, were in fine form.

The afternoon was drawing to a close and it was time to retire to the farm and catch up with notes after another marvellously varied and productive day.

### Day 8 Sunday 15<sup>th</sup> September Cederberg, Middleberg Pass, to Ceres

Saying farewell to all at De Lande we headed south. This year we knew that there was little in flower in the Tanqua Karoo, so the decision was made to take an alternative route to Ceres, as we had also done last year, not our usual one across the Tanqua. This took us through fascinating new habitat south of Nieuwoudtville, thence to the Cederberg, Pakhuis Pass, Clanwilliam, south to Citrusdal, over the Middleberg Pass and Gydo Pass, and finally into Ceres.

It was very difficult not to stop as often as we wanted to but we had a long distance to cover today, with so many potential stops. Ludwig's Bustards were seen closely, and Southern Pale Chanting Goshawks were on telegraph posts.

A long dirt road took us towards the Cederberg. At Botterkloof Pass was striking *Pelargonium magenteum*. Single stemmed *Aloe comosa* became a feature, a local endemic, and *Amellus tridactylus* was added to the list. Attractive flowering *Cotyledon orbiculata* prompted a stop, where we found also *Lapeirousia fabricii* and *Crassula columnaris*. The next stop had many *Holothrix secunda*, and *Tetragonia rosea*. Finally we reached the tarmac, now with the fine scenery of the Cedarberg ahead.

Pakhuis Pass is always a fascinating area. Here were many plants including *Phylica olaeifolia*, *Eriocephalus purpureus, Hemimeris racemosa, Lobostemon laevigatus, Metalasia densa, Felicia dregei, Lebeckia pauciflora, Searsia undulata* and *Stoebe plumosa*. A great find was the local endemic *Ruschia cederbergensis,* and *Adenandra marginata* was also new. Plants continued with yellow flowered *Oxalis obtusa, Felicia merxmuelleri,* and *Cheilanthes multifidus*. Proteaceae were a feature, namely *Leucospermum calligerum, Protea laurifolia, Protea glabra, Leucadendron loranthifolium, Leucadendron pubescens,* and *Paranormus bracteolaris. Crassula saxifraga* was new for the tour. Here was an impressive Aardvark burrow. Last year I had been very pleased to find a skull of a small cat. I immediately thought, and after much consideration, believe this to be the skull of Black-footed Cat (Small Spotted Cat), a scarce and rarely seen species. The skull is very small indeed, this being one of the world's smallest cats.

Time was speeding by so we ate lunch and were soon on the road again. The next part of the journey was on a fast stretch of the N7 as far south as Citrusdal. Near here was fine *Ixia scillaris*, and *Wurmbea elongata* was new for us.

Next stop was at Middleberg Pass where among other things we saw *Pelargonium tabulare, Babiana mucronata,* and attractive female *Leucadendron rubrum* new for the list. Roadside stops south of here produced some fine monocots including *Moraea longistyla, Wurmbea spicata,* and *Pterygodium alatum.* 

Another pass brought us into quite different habitat and landscape, the verdant fruit growing region of the Ceres valley. An extensive recent burn produced a superb orchid site. This was a stunning place, and another tour highlight. There was a superb show of orange *Satyrium coriifolium*, and also *Satyrium erectum*, *Satyrium bicorne*, and very beautiful *Moraea villosa*. *Gladiolus maculatus* was in flower. The light was fading as we made our way to the hotel.

In Ceres we arranged ourselves into the comfortable rooms at a pleasant riverside location, before enjoying dinner.

## Day 9 Monday 16<sup>th</sup> September Ceres and Tulbagh

First we drove to another extensive burn site near town, this one dating from two years ago. Here we found *Ixia capillaris, Gladiolus recurvus,* and *Gladiolus hirsutus.* The yellow *Moraea galaxia* was in flower, but this year we did not see the related pink local endemic *Moraea variabilis.* Orchids were represented by *Disa biflora* and *Disperis circumflexa* and many *Satyrium pumilum* was a bonus, at a new site for the species for us. *Protea lorifolia* was in flower and *Hyobanche glabrata* was a bonus. Male *Leucadendron rubrum* looked very different to the female we had seen yesterday.

At the next site, a burn slope now ten years after the burn, we were especially hoping to find the Spider Orchid, *Bartholina burmanniana*, with its superb finely divided flowers. Before long we found the first, in perfect condition, and a total of some five were found this year. Among other species here were yellow flowered *Geissorhiza ornithogaloides* and the orchid *Disperis villosa*.

Other shorter stops produced among other things the distinctive *Babiana lineolata*, rather common, the pink *Ixia latifolia*. Sheltered banks had the orchids *Disperis bolusiana* and *Pterygodium pentherianum* and the unusual irid *Xenoscapa fistulosa*. Another spider lily was in bloom, this one *Ferraria divaricata*. *Lachenalia juncifolia* had distinctive narrow leaves, and *Lachenalia pallida* was here too.

At a new site for us, a recent burn, we ate lunch. Small yellow flowered *Nemesia gracilis* was here, and the orchid *Disa flexuosa* and the lovely blue flowered pea *Lotononis argentea* were new for the tour.

In the afternoon we headed west, to the town of Tulbagh, only some forty kilometres away. The first stop yielded very many orange flowered *Ornithogalum dubium*. Most of the deep red *Babiana villosa*, a local speciality, had gone over this year but we found a couple in flower. Also here was *Albuca foetida*. A beautiful *Pelargonium* with trefoil leaves that I had found here last year proved hard to identify with the monograph, but unfortunately I could not relocate it today.

Nearby were *Ornithogalum thyrsoides, Geissorhiza aspera,* and the local endemic *Lachenalia mediana rogersii*. A short walk took us to a site where I'd discovered the endemic *Moraea tulbaghensis* a few years ago. However this very special orange species had already gone over this year. We did see *Geissorhiza inflexa,* and *Athanasia trifurcata*.

Lastly we drove into the town of Tulbagh to stroll the street of beautifully preserved traditional Cape buildings which looked fine in the late afternoon light. *Moraea setifolia* bloomed near the information office.

We returned to Ceres after a very enjoyable afternoon.

#### Day 10 Tuesday 17<sup>th</sup> September Ceres to De Hoop via Worcester & Swellendam

After another good breakfast we headed again over Michell's Pass. The route took us south along the Breede River Valley. In Worcester we visited a large shopping centre which enabled a few practicalities to be sorted, and where was a well stocked bookshop.

We spent most of the morning exploring Worcester Karoo Botanic Garden. Above the planted gardens is native succulent karoo vegetation, here on Malmesbury shale. Here *Euclea undulata* was common and shrubby *Wahlenbergia nodosa* was in flower. The succulent rather crassula like shrub here was *Othonna arbuscula*. *Nymania capensis* was in both flower and impressive fruit. A good number of *Haworthia arachnoidea* in flower was a highlight, and there were *Haworthia pumila* rosettes. There were some impressive *Conophytum ficiforme* on the rocks. Among the many other plants here were *Ornithogalum hispidum*, *Crassula ovata*, *Crassula fascicularis*, *Crassula umbella*, *Searsia dissecta*, *Manochlamys albicans*, *Selago eckloniana*, *Passerina obtusifolia*, and *Albuca longipes*. The distinctive leaves of *Oxalis convexula* were identified and *Cyanella lutea* was in flower. The local speciality *Drosanthemum speciosum* boasted striking red flowers, and *Drosanthemum thudichumii* was also in flower. *Senecio junceus* had succulent leafless stems.

Acacia Pied Barbet called from cactus-like euphorbias in the gardens where Leopard Tortoise and Rock Hyrax were on the lawns.

Among the plantings, predominantly of local native species, were a good selection of species growing wild such as *Pterygodium volucris* and *Polygala microlopha*. Sadly the little shop here which used to stock a small selection of books, is no more. A distinctive beetle here was *Thermophilum decemguttatum*.

Whilst waiting for lunch we searched a rock outcrop for the local endemic *Lachenalia stayneri* which I had discovered on a previous visit. None however this year. On the road again we headed towards Robertson, motoring purposefully as the gates at De Hoop close at 6 pm. Once through

Bredasdorp, and after only a few minutes on the N2, we turned south onto the unpaved roads of the Agulhas Plains. We had fine views of Blue Cranes, common in the area.

As we arrived on the coastal limestone a troop of baboons was one of the few seen this tour. It was now but a short drive to The De Hoop Collection, a beautiful group of Cape Dutch style bungalows and other buildings inside the eponymous nature reserve.

Once inside the park we drove down from the limestone ridge onto the limestone flats, all full of new plants that we would have plenty of time to appreciate the next day. Ostriches were again much in evidence, Eland and Bontebok grazed on the flats, and Cape Francolins were fearless on the lawns. Soon we settled into the comfortable chalet rooms, beautifully restored, each with kitchen and dining table, with a wealth of wildlife just outside the door.

There was a chance to catch up with notes etc. before enjoying a very good meal in the impressive restaurant. A feature here is the very well stocked circular wine cellar.

### Day 11 Wednesday 18<sup>th</sup> September De Hoop

Breakfast was eaten outside, overlooking the vlei where among many birds were Great Crested Grebe, both Flamingos, and African Spoonbill. Cape Spurfowl stole a slice of toast from my hand!

Initially we drove rather purposefully down to the coast, where the dunes held many new plants, among them *Berkheya coriacea, Helichrysum dasyanthum, Phylica ericoides,* and *Cassine peragua.* The parasites *Thesidium humile* and *Viscum capense* were here. The leaves of *Massonia pustulata* were certainly very pustulate. *Agathosma collina* was co-dominant.

A short walk took us onto open dunes, remarkably still today with no wind, which is so often a feature here, and we enjoyed the wonderful spectacle of several Southern Right Whales near to shore. However there were many fewer than is usual this year, only some ten or so seen whereas we have counted up to sixty. Nevertheless we had fine views and sat quietly watching these marvellous cetaceans for as long as we wished. The very impressive *Senecio elegans* bloomed on the dunes, where *Passerina robusta* was colonising, and there was much *Morella cordifolia*. *Chasmanthe aethiopica* was in fruit. Cape Bulbuls and Cape Buntings were much in evidence, and Bar-throated Apalis skulked.

*Gladiolus cunonius* prompted an almost immediate stop once we'd left the car park and here was serendipity as I found the scarce orchid *Holothrix mundii* new for the tour, some five in flower. Nearby was the beautiful *Jamesbrittenia albomarginata*.

Denham's Bustard was on the horizon where several Agulhas Long-billed Larks were displaying. *Lachenalia magentea* was new for the tour.

Lunch was eaten back at the restaurant.

In the afternoon we headed onto the limestone ridge, which produced a wealth of new species in fine limestone fynbos. Cape Mountain Zebras grazed on the flats, and *Moraea bulbillifera* was in flower.

On the limestone slopes the dominant proteas were *Leucospermum truncatum*, *Leucadendron muirii*, *Leucadendron meridianum*, and *Protea obtusifolia*, whilst ericas were represented by *Erica coccinea* (the yellow flowered form), *Erica scytophylla*, and *Erica bruniifolia*. Everlastings were a feature, including *Syncarpha chlorochrysum*, *Syncarpha argyropsis*, and *Syncarpha canescens*. Other species included *Polygala peduncularis*, *Polygala dasyphylla*, Ursinia dentata, Metalasia calcicola, Acmadenia mundiana, and Wahlenbergia calcarea. Pelargonium betulinum was in leaf this year. Attractive *Linum africanum* was in flower.

A tall lanky lobelia was *Lobelia linearis*. We sauntered slowly along the road, with fine views across the reserve, the dunes, the sea, and to the hotel. Pink *Chironia tetragona* was in striking flower.

A very extensive recent burn site had much of the verbena *Chascanum cernuum*, yellow *Gnidia* galpinii, and several confusing species of *Hermannia*. Tall *Lobelia valida* was in impressive flower and *Bobartia macrospatha* was identified. The only *Leonotis leonurus* of the tour was here and *Pelargonium crispum* was added to the list.

Among the many other plants this afternoon were *Euchaetis burchelli*, *Coleonema album*, *Berkheya coriacea*, and *Selago aspera*. The distictive fanned undulate leaves of *Boophone disticha* were admired.

Grey Rhebok grazed on the flats as we returned to our houses.

At the HQ we continued the plant list before dinner.

## Day 12 Thursday 19<sup>th</sup> September De Hoop, Bredasdorp, Napier, Caledon, Houwhoek

We said farewell to De Hoop, African Hoopoe near the rooms as we left. A short stop was made for *Bobartia macrospatha* in flower on the limestone slopes.

Just outside the reserve fine *Gasteria carinata* flowered on a low cliff. The generic name derives from the likeness of the flower's shape to a stomach. Also here were *Sarcostemma viminale* and *Bulbine praemorsa*.

We drove purposefully towards Bredasdorp. A short stop was made to admire *Aloe ferox*, and many Blue Cranes punctuated the journey (75 in one group). Cape Vulture was in the air. We pressed on through Bredasdorp, the southernmost town in Africa (here we were not far from Cape Agulhas).

We continued our journey towards Napier where we visited a small protected patch of renosterveld. This is an excellent site, although it was all very dry this year and the usual flowers were in much lower numbers than is usual. *Babiana patersoniae* and *Babiana patula* were both here. The beautiful pink *Ixia longituba* was in flower and *Ixia flexuosa* was here too. *Hyobanche sanguinea* was in good form. Among other species were *Polygala refracta, Aspalathus nigra, Pterygodium catholicum, Pelargonium alchemilloides, Hermannia joubertiana,* and *Trachyandra chlamydophylla*. We found a rosette of *Haworthia minima*. The only *Wurmbea marginata* of the tour was inadvertently picked by Susan as she was photographing something else! *Moraea bellendenii* was attractive.

Lunch was good and speedily served at a pleasant farmstall in the lovely town of Napier.

We headed west to Caledon, near where a fine patch of native vegetation had *Bulbinella triquetra*, *Hesperantha falcata*, *Ixia flexuosa*, *Wachendorfia paniculata*, *Babiana purpurea*, *Berkheya armata*, *Moraea lewisiae*, *Diosma hirsuta*, and much *Watsonia meriana*.

We arrived at Houwhoek with time to make a first visit to the extensive burn site near the hotel. This burn is several years old but there had been also a recent burn on the same site and the flora was consequently excellent this year. Among the many highlights were many of the lovely pink *Geissorhiza schinzii*, and stunning *Phaenocoma prolifera*. *Lanaria lanata*, the only representative of its family, was here. The grass *Aristida diffusa* was numerous and I was pleased to find the attractive *Zaluzianskya divaricata*. There was much more but we would return here tomorrow for further exploration.

Very close was the Houwhoek Inn, where we were to spend the last two nights of the tour. We settled in to the comfortable rooms, complete with fireplaces, and enjoyed a hearty dinner in the welcoming dining room.

### Day 13 Friday 20<sup>th</sup> September Houwhoek, Fernkloof, Rooisand, Kleinmond

We returned to the site near the hotel, where there was still much to see. *Microdon dubius, Berzelia lanuginosa, Edmondia fasciculata, Lobelia tomentosa, Lobelia linearis,* and *Lobelia pinifolia* were all here, and among the *Ericas* were *Erica hispidula* and *Erica corydalis*. The variety continued with *Othonna quinquedentata, Ursinia paleacea, Geissorhiza humilis, Wahlenbergia capensis,* and *Corymbium africanum*.

Leaves of the ground protea *Protea scabra* were distinctive. Also here were *Athrixia heterophylla*, *Stoebe aethiopica*, the impressive grass *Pentameris macrocalycina*, *Bulbine praemorsa*, and *Pelargonium chamaedryfolium*. *Satyrium bicallosum* was new to the orchid list.

By the rushing stream below us flowered *Wachendorfia thyrsiflora* and venturing down there Mayur found *Moraea unguiculata*.

Back in the vehicle, on Houwhoek Pass we saw two species of *Watsonia* on the roadsides, *Watsonia marginata* and *Watsonia meriana*.

Next we travelled down to the coast at Hermanus and visited the lovely reserve at Fernkloof. African Fish Eagle flew near the coast. At Fernkloof we began in the small visitor centre where a small selection of species currently in flower is labelled. But unusually this year many were mislabelled, some spectacularly so, for example *Salvia africana-lutea* was labelled as *Thesium euphorbioides* and *Gladiolus cunonius* labelled as *Ixia micrandra*! Particularly of use are the labelled restios, always a feature of this site.

We walked up the gully noting much of interest. *Protea eximia* had impressively large blooms, and there were *Protea longifolia*, and *Protea cordata* in leaf. Among quite a selection of *Thesium* species, *Thesium strictum* and *Thesium euphorbioides* were distinctive. *Gladiolus bullatus* was new for the tour. Plants continued with *Penaea cneorum*, *Saltera sarcocolla*, *Retzia capensis* in flower this year, and

*Struthiola tomentosa*. Below upper cliffs were *Hypocalyptus oxalidifolius*, many *Geissorhiza bryicola* in its specific wet rock habitat, and *Bulbine lagopus*.

*Grubbia tomentosa* represented an endemic family of only three species, all of which occur in the area.

There was so much to see here, but we made it back to the entrance where we enjoyed our picnic, prepared by the hotel and rather good.

The next stop had several of the atypical and local *Gladiolus trichonemifolius* all in fruit this year. Other plants included *Acrosanthes teretifolia, Lobelia coronopifolia, Wachendorfia paniculata, Drosera trinervia* in flower, and *Trichocephalus stipularis*. Closely perched Malachite Sunbird was admired.

Another rough track, lined with alien *Leptospermum laevigatum*, took us towards the shores of an estuary. Wet roadsides had *Sparaxis grandiflora violacea*, *Geissorhiza hispidula*, *Ixia micrandra*, and *Moraea lugubris*. On the lake shore were many *Satyrium odorum*, *Cyperus thunbergii*, and the attractive *Manulea tomentosa*. On the water were Cape Shoveler, Avocet on the mud flats, and Pied Kingfisher in flight.

*Erica bruniades* and *Erica pattersoniae* were in good flower at our next stop. A great find was a number of the blue 'flowered' *Gnidia penicillata*, and *Serruria adscendens* was a local endemic, the Kleinmond Spiderhead. There was much fine *Mimetes cucullatus*, and pretty *Lachnaea densiflora*. A last roadside stop was made to admire a fine display of pink *Protea compacta*, the Bot River Protea. Here too was *Leucadendron linifolium*.

That evening we had a last run through the checklist before enjoying another good dinner. Caroline gave a kind speech of thanks to the leaders.

Day 14 Saturday 21<sup>st</sup> September

Day 15 Sunday 22<sup>nd</sup> September

Kogelberg, Betty's Bay,to Cape Town, Departure (or not!) Flight to UK

All good things come to an end, and today was the last day of the tour.

There was a little time this morning to spend in the Kogelberg reserve. The beautiful entrance road had much of interest including *Leucospermum oleifolium*, *Grubbia rosmarinifolia* our second of the three species in the genus, and lovely *Adenandra brachyphylla*. There was beautiful showy pink *Gladiolus carneus* and lovely *Gladiolus debilis* too.

We parked at the new reserve buildings and walked up to an extensive burn in the light rain. On this the last day we were still seeing many new plants, a further reminder of just how rich the Cape flora is. Among many impressive plants here were *Bobartia gladiata*, *Geissorhiza ramosa*, *Moraea anomala*, *Moraea unguiculata*, *Ursinia pinnata*, and *Senecio hastifolius*. There was a fine area of *Schizaea pectinata* and *Disa bracteata* was in good form. Close Yellow Bishops were admired. In wet flushes was *Prionium serratum*. The coast road took us to Betty's Bay, the pink flowered and straggly *Protea compacta* again seen on the roadsides.

Usually on this last day we would have lunch at the Harold Porter Botanic Garden, and take a stroll in the beautiful gardens themselves, and into the fynbos above. However a very extensive burn at Betty's Bay meant there was currently little to see in the fynbos, and coincidentally the good restaurant was currently closed. I leave in the account of last years' visit here as we'll certainly be back in the future.

(Harold Porter Botanic Garden is another fine garden, with native fynbos above the extensive plantings of native plants. Unfortunately another garden where the bookshop has been closed for a few years but they assure me it would re-open one day! Carpenter Bees nested in a post by the gate. Among plants growing wild were *Oxalis livida, Rubus rigidus, Senecio rigidus,* and the yellow flowered *Commelina africana*. In the native fynbos *Erica retorta* was in fine bloom, and we saw *Saltera sarcocolla, Indigofera glomerata,* and *Podalyria oleaefolia.* The special endemic *Retzia capensis* had finished flowering as is usual at this time, as it had at Fernkloof yesterday. The umbel *Centella triloba* was found on upper cliffs. *Mimetes cucullatus* was in fine flower, as was *Erica caffra* beside the stream. *Leucadendron gandogeri* was a feature.

John and Hilary found a filmy fern, *Hymenophyllum capense*, a great find, as well as *Dryopteris inaequalis* new for the tour. Indeed ferns feature here, and among other species seen were *Blechnum capense*, *Blechnum punctulatum*, *Blechnum tabulare*, and *Histiopteris incisa*. I was very pleased to find the distinctive *Schizaea pectinata*. The nymphalid Protea Emperor flew over forest patches. A lone wild *Gladiolus cunonius* bloomed in the beds.)

Back to this year.....

We headed for the Betty's Bay African Penguin colony, where we ate lunch in a cafe restaurant, with time to use the facilities for changing in, in preparation for the flight later in the day. Crowned and Bank Cormorants were among the commoner Cape and White-breasted and of course we had many fine penguin views. Another short stop had beautiful *Orphium frutescens* in flower, and nearby Spotted Thick-knee. There was fine showy *Satyrium carneum* on roadsides.

So it was time for the drive back towards Cape Town, the route taking us along the scenic coast of False Bay.

Sad farewells followed after a fine and productive tour, and we went our various ways from the airport.

On arrival in Europe I immediately set to work on this report, especially the very extensive plant list, now well over fifty pages long.

#### South Africa Systematic Lists 2019

#### **The Itinerary**

Day 1. Sunday 8th September. Arrival. Pinelands. Kirstenbosch Botanic Garden.

Day 2. Monday 9th September. Observatory. Boulders. Cape Point.

Day 3. Tuesday 10<sup>th</sup> September. *Babiana ringens* site. Waylands. Tienie Versveld. Langebaan.

Day 4. Wednesday 11<sup>th</sup> September. West Coast National Park.

Day 5. Thursday 12<sup>th</sup> September. Veldriff. Verloren Vlei. Clanwilliam. Knervslakte. Van Rhyn's Pass. Nieuwoudtville.

Day 6. Friday 13th September. Nieuwoudtville. Papkuilsfontein. Hantam Botanic Garden.

Day 7. Saturday 14th September. Quiver Tree Forest. Nieuwoudtville. Bikoes. Wild Flower Reserve.

Day 8. Sunday 15th September. South from Nieuwoudtville. Pakhuis Pass. Middleberg Pass. Ceres.

Day 9. Monday 16<sup>th</sup> September. Ceres area. Tulbagh area.

Day 10. Tuesday 17<sup>th</sup> September. Worcester Botanic Garden. To De Hoop. Day 11. Wednesday 18<sup>th</sup> September. De Hoop.

Day 12. Thursday 19<sup>th</sup> September. Bredasdorp. Napier. Caledon. Houwhoek.

Day 13. Friday 20th September. Houwhoek. Fernkloof. Rooisand. Kleinmond.

Day 14. Saturday 21<sup>st</sup> September. Kogelberg. To Cape Town. Day 15. Sunday 22<sup>nd</sup> September. Departure.

#### Systematic List Number 1

**Plants** 

#### **Compiled by Paul Cardy**

This is based on the plant list I created from scratch after our first tour here in 2009 (PC and CC), and includes additions from the 2010 tour (OM and CC), the 2011, 2012, 2013 tours (PC and CC), the 2014 and 2017 tours (PC), and the 2018 tour (PC and CF). Species not seen in 2019 are retained in the list together with the year they were last seen. Many species were added in 2019 and are annotated 'New in 2019'. Of course all species with no year annotation were seen in 2019 too. A few species are retained from sites not visited in 2019 to keep the list as complete as possible, as to some extent the exact sites visited will vary slightly from year to year. I also include some records from my days exploring before the tour for interest. This year we did not travel through the Tanqua Karoo (due to very limited flowering there this year), or visit Harold Porter Botanic Garden (due to extensive burn damage), but records for these are retained as these sites will be included again in future.

For families likely to be unfamiliar to European botanists I have given a few defining characteristics. As an aide memoire I have usually given a few species characters too, which with locality information may help to identify photographs. Of course comments under each species are of necessity brief, and a character given for one species does not mean it is not shown by others in the list! The list should be used in conjunction with the relevant books.

Many books were used in the field, and later in compiling the list. Perhaps most comprehensively useful was 'Field Guide To Fynbos' by John Manning. 'Cape Plants. A Conspectus of the Cape Flora of South Africa' by Goldblatt and Manning and 'Plant Genera of the South-western Cape' by Trinders-Smith were both invaluable. New in 2013 was the revised Cape Plants 'Plants of the Greater Cape Floristic Region, 1: The Core Cape Flora' by Manning and Goldblatt, Sanbi 2012, and '2: The Extra Cape Flora', by D.A.Snijman (Editor), 2013. These are now the standard works to the Cape Flora (PGCFR).

The regional flower guides produced by the Botanical Society of South Africa vary greatly in species coverage and usefulness in the field! For petaloid monocots 'The Color Encyclopedia (sic) of Cape Bulbs' by Manning, Goldblatt and Snijman, is excellent and is comprehensive for most genera. 'Orchids of South Africa, a Field Guide' by Johnson, Bytebier, and Starker, Struick 2015, was used for that family. Where available many monographs were also used, such as 'Ericas of South Africa' by Schumann et al., 'Gladiolus in Southern Africa' by Goldblatt and Manning, and 'The Moraeas of Southern Africa' by Goldblatt.

The bewildering variety and richness of the Cape Flora, with many very large and complex genera, meant in no way could we identify everything we saw. Certain families were covered much better than others. The petaloid monocots were well studied, although certainly several remain unidentified. Vast families such as the Aizoaceae are only seriously tackled by an expert on that family.

The alphabetic arrangement and classification follow 'Plants of the Greater Cape Floristic Region' (PGCFR).

In 2017 there had been little rain in much of the area, and severe water restrictions were in place (and indeed still so this year). However in 2017 it was only at Nieuwoudtville that there was a very apparent difference in the flora to that we usually see. Elsewhere things were more or less as 'normal' and indeed many new plants were found. In 2018 there had been prolonged rain, although not yet enough to reverse the water restrictions. Consequently the flora was superb in 2018 and in many places the floral display was breathtaking. Rain too in 2019, with lessened water restrictions, but Nieuwoudtville again much dryer than is usual.

#### Pteridophytes

Reference:- 'Ferns of Southern Africa, A Comprehensive Guide', by Crouch et al. Struick, 2011.

Anemiaceae Mohria caffrorum	Napier,	Kirstenbosch, Nieuwoudtville waterfall, Worcester, Ceres, Caledon, etc.
Aspleniaceae Asplenium adiantum-nigrum Asplenium aethiopicum Asplenium trichomanes		Black Spleenwort. Kirstenbosch. African Spleenwort. Kirstenbosch. Maidenhair Spleenwort. Kirstenbosch.
Blechnaceae Blechnum attenuatum Blechnum australe Blechnum capense Blechnum punctulatum Blechnum tabulare		Kirstenbosch. Southern Deer Fern. Kirstenbosch 2014. Cape Deer Fern. Harold Porter Botanic Garden and Fernkloof. Harold Porter Botanic Garden and Fernkloof. Mountain Deer Fern. Kirstenbosch and Harold Porter Botanic Garden.
Cyathaceae Cyathea capensis		Cape Tree Fern. Kirstenbosch.
Dennstaedtiaceae Histiopteris incisa Hypolepis sparsisora Hypolepis villoso-viscida Pteridium aquilinum ssp.capense		Kirstenbosch and Fernkloof. Grootvadersbosch 2009. Greyton 2019 (PGC). Bracken. Widespread.
Dryopteridaceae Dryopteris inaequalis Polystichum pungens Rumohra adiantiformis		Harold Porter Botanic Garden, new in 2018. Prickly Shieldfern. Kirstenbosch. Cape Point, Fernkloof, Harold Porter Botanic Garden, and Houwhoek.
Gleicheniaceae Gleichenia polypodioides		Coral Fern. Cape Point <i>Mimetes hirtus</i> site, and Harold Porter Botanic Garden. Not seen 2019.
Hymenophyllaceae Hymenophyllum capense Hymenophyllum tunbrigense		A filmy fern. Harold Porter fynbos rocks, 2018. Tunbridge Filmy Fern. Kirstenbosch, on rocks in wooded gorge, new in 2019 (PGC).
Lycopodiaceae Lycopodiella cernua		Michell's Pass wet roadside rocks (from vehicle!).

Nephrolepidaceae Nephrolepis cordifolia

Osmundaceae Todea barbara

Polypodiaceae Pleopeltis macrocarpa Polypodium ensiforme Polypodium vulgare

Pteridaceae Adiantum aethiopicum Cheilanthes capensis Cheilanthes contracta Cheilanthes deltoidea Cheilanthes depauperata Cheilanthes hastata Cheilanthes induta Cheilanthes multifidus Pellaea pteroides Pteris dentata

Schizaeaceae Schizaea pectinata

Thelypteridaceae Thelypteris confluens

#### Gymnosperms

Cupressaceae Widdringtonia nodiflora

Pinaceae Pinus pinaster Pinus pinea Pinus radiata

Podocarpaceae Afrocarpus falcatus Podocarpus elongatus Podocarpus latifolius

#### Angiosperms Palaeodicotyledons

Lauraceae Cassytha ciliolata

Cryptocarya angustifolia

Piperaceae Peperomia retusa Peperomia tetraphylla Boston Fern. Naturalised at Kirstenbosch. = *N.exaltata*.

Kirstenbosch, Fernkloof, Harold Porter Botanic Garden.

Kirstenbosch. Variable fronds. Greyton 2019 (PGC). Common Polypody. Grootvadersbosch 2009.

Kirstenbosch. Cape Lip Fern. Nieuwoudtville. Bain's Kloof Pass, 2014. Wild in Worcester botanic garden. Gannaga Pass 2009. Postberg, Nieuwoudtville, and Ceres. Nieuwoudtville waterfall. Postberg and Cederberg lunch site. Myrtle Fern. Kirstenbosch and Fernkloof. Grootvadersbosch 2009.

Curly Grass Fern. Cape Point, and many fine plants in Kogelberg.

Harold Porter Botanic Garden 2018.

Mountain Cypress. Native. Fernkloof, Kirstenbosch, etc.

Maritime Pine. Alien. Widely naturalised. Stone Pine. Alien. Monterey Pine. Alien. In plantations but not naturalised.

Outeniqua Yellowwood. Naturalised in Kirstenbosch. Leaves narrower than *P.latifolius*. Kirstenbosch.

False Dodder. Yellowish parasitic vine. Widespread and locally very common. Small tree. Harold Porter Botanic Garden 2018.

Flowers in thread-like terminal spikes. Kirstenbosch. Epiphytic in Grootvadersbosch, 2009. Leaves in whorls of 4 with flowers in narrow terminal whitish spikes.

#### Monocotyledons

Agapanthaceae	
Agapanthus africanus	Gone over at Betty's Bay burn site 2009.
Agavaceae	
Agave americana	Century Plant. Occasionally naturalised.
Alliaceae	
Allium neapolitanum	Naples Garlic. Alien. Nieuwoudtville, Hantam, 2014.
Tulbaghia capensis	Allium scented. Flowers purple. Waylands and Tienie Versveld.
Tulbaghia dregeana	Allium scented. Flowers in nodding heads, cream with yellow fleshy ring in the throat. Hantam botanic garden, not seen 2018 0r 2019.
Amaryllidaceae	
	ecently published standard work 'The Amaryllidaceae of Southern Africa' by
Graham Duncan, Umdaus Press, 201	
N.B. most are autumn flowering and	
Ammocharis longifolia	Noted in leaf, e.g. Near Mamre, and Tienie Versveld.
Boophone disticha	Undulate leaves in a spreading fan. In leaf at De Hoop 2019.
Boophone haemanthoides	Leaves in a spreading fan. Leaves at Nieuwoudtville.
ssp.ernesti-ruschii	
Brunsvigia bosmaniae	Leaves broad and leathery. Leaves locally common at Nieuwoudtville.
Brunsvigia comptonii	Probably this species seen in leaf, Tanqua Karoo. 2017.
Brunsvigia marginata	Probably this species also seen in leaf.
Brunsvigia orientalis	Leaves ovate, flat on ground, scattered records, e.g. West Coast National Park.
Brunsvigia striata	Leaves elliptical, pressed to ground. Nieuwoudtville?
Crinum variabile	Leaves in waterside vegetation, Nieuwoudtville 2018.
Crossyne flava	Leaves 4 to 6, prostrate or spreading, to 12 cm wide, leathery with coarse
	bristly margins. Nieuwoudtville.
Crossyne guttata	Leaves 4 to 6, broadly strap shaped, to 9cm wide, margins fringed with bristles which are longer in young leaves. Tienie Versveld.
Gethyllis afra	Leaves De Hoop? 2012.
Gethyllis campanulata	Leaves many, narrow and wiry. Leaves at Nieuwoudtville 2011.
Gethyllis villosa	Leaves Hermanus area 2010.
Gethyllis spp.	Other species likely present in leaf.
Haemanthus amarylloides	In leaf Nieuwoudtville and Cederberg.
ssp.amarylloides	
Haemanthus coccineus	Leaves at Gannaga Pass 2009. Surely seen elsewhere too.
Haemanthus sanguineus	Leaves 2, prostrate and leathery. Widespread in leaf.
Nerine sarniensis	Guernsey Lily. Many in leaf, wild at Harold Porter Botanic Garden, 2018.
Strumaria gemmata	In fruit at De Hoop.
Strumaria spiralis	Scape wiry and colied in lower part. Flowers white. In flower at Rooisand.
Anthericaceae (included in Agavace	ae in PGCFR)
Chlorophytum has linear leaves in a	basal rosette. Pedicels jointed. Capsule prominently three angled.
Chlorophytum triflorum	Flowers white, reddish on reverse. Tienie Versveld and West Coast National Park.
Chlorophytum undulatum	Flowers white with dark keels, 15 to 18mm across. Waylands, Tienie Versveld, West Coast NP, Nieuwoudtville, Ceres, etc.
Aponogetonaceae	
Aponogeton angustifolius	Aquatic. Lanceolate leaves. Waylands.Not seen 2018.

Aquatic. Broader leaves. Ceres area.

Calla Lily. Widespread and very common. Deciduous. Flowers strongly scented. On dolerite at Nieuwoudtville.

Asparagaceae

Araceae

Aponogeton distachyos

Zantedeschia aethiopica

Zantedeschia odorata

Asparagus aethiopicus	Spiny, stems pale. Cladodes 4 to 6 in fascicles. Kirstenbosch, West Coast NP etc.
Asparagus asparagoides	Cladodes ovate. Kirstenbosch, Babiana ringens site.
Asparagus capensis	Spiny, cladodes in clusters of 5, hairy. Darling area. West Coast NP, etc.
Asparagus exuvialis	Shrub, white membranous bark. Cladodes filiform. Nieuwoudtville and
	Ceres.
Asparagus juniperoides	An allied species north of Clanwilliam ( <i>alopecurus</i> ?) and at Worcester
	Botanic Garden. 2019.
Asparagus lignosus	Spiny, stems pale, cladodes terete. Kirstenbosch, Cape Point lunch. West
1 0 0	Coast NP.
Asparagus ovatus	Cladodes ovate, many veined. Nieuwoudtville.
Asparagus retrofractus	Spiny, grey stems, cladodes in feathery fascicles. Scattered records e.g.
	Nieuwoudtville, Waylands.
Asparagus rubicundus	Spiny, stems dark brown. Cladodes c.10 in fascicles. Kirstenbosch, West
	Coast NP, Waylands, etc.
Asparagus scandens	Cladodes in threes in one plane, one smaller opposite a larger pair.
	Kirstenbosch and Observatory.
Asparagus suaveolens	Spiny, cladodes 1 to 6 in fascicles. Nieuwoudtville waterfall.
Asparagus undulatus	This at <i>Babiana ringens</i> site?
Asparagus spp.	Other species surely seen. Some 36 occur.
Asphodelaceae	
Aloe arborescens	Many branched shrub, leaves in apical rosettes. Near Bredasdorp.
Aloe arenicola	Numerous white spots on leaves. Sandveld near Elands Bay, 2014.
Aloe brevifolia	A dwarf aloe with broad thick leaves. De Hoop 2011.
Aloe comosa	Single-stemmed. Botterkloof Pass, a very local endemic.
Aloe dichotoma	Kerkeboom or Quiver Tree. Quiver Tree Forest.
Aloe falcata	Multi-stemmed. Tubular flowers. Tanqua Karoo, leaves only 2014?
Aloe ferox	Single-stemmed. De Hoop area, locally common.
Aloe glauca	A stemless aloe. North of Nieuwoudtville, new in 2018.
Aloe microstigma	Wild in Worcester Botanic Garden.
Aloe mitriformis	Leaves short, margins have prickles. Flowers scarlet in drooping heads.
	In flower at Nieuwoudtville waterfall. West Coast NP (not seen here 2019).
	(A.perfoliata).
Aloe succotrina	Hermanus coast, PGC, 2018.
Aloe variegata	Leaves with white mottling. Flowers red, drooping. Karoo stop en route
	to Nieuwoudtville, in fine flower 2012. 2014 Tanqua Karoo near Ceres.
	h densely bearded filaments. Fleshy basal leaves.
Bulbine alooides	Leaves at Nieuwoudtville, broad with hairy margins 2014. Flowers March
	to May.
Bulbine annua	Annual, leaves many in basal rosette, long pedicels. West Coast NP and De
	Hoop dunes and flats.
Bulbine cepacea	Leaves narrowly lanceolate, surrounded at base by fibrous sheaths. Tienie
	Versveld and Ceres.
Bulbine frutescens	Shrublet. Nieuwoudtville to Calvinia roadside and Karoo. Not seen 2018 or
	2019.
Bulbine lagopus	Geophyte to 40 cm, forming tufts. Fernkloof.
Bulbine praemorsa	Leaves thick, narrowly channelled. Kirstenbosch, Houwhoek, and
	Nieuwoudtville.
Bulbine succulenta	Leaves short and thick with a basal collar of stiff fibres. Nieuwoudtville.
Bulbine torta	Leaves coiled, flowers in short racemes. Pakhuis Pass, in leaf.
Bulbinella have long-lived flowers, usually	y in a conical raceme, and smooth filaments.
Bulbinella barkerae	To 60cm. White flowers in a narrow cylindrical raceme, musty odor.
Napier	
	Renosterveld 2018.
Bulbinella caudafelis	To 80cm. White flowers with pink tinge in narrow spikes. Karoo and west
	of Bredasdorp 2009. 2012 Caledon. West Coast NP 2013 and 2014. 2018
	and 2019, near Citrusdal. 2019 Englishman's Grave.
Bulbinella eburniflora	To 75cm. Small creamy white flowers, with musty odour. Nieuwoudtville,
Greentours Natur	al History Holidays www.greentours.co.uk 23
Orecinours Mature	in mistory mondays www.greentours.co.uk 25

	Bikoes.
Bulbinella elegans	To 60cm. Flowers small in conical racemes, yellow or white tinged pink.
0	Nieuwoudtville wild flower reserve and Hantam.
Bulbinella latifolia latifolia	Spikes of yellow flowers. Leaves to 65mm. Probably present,
	Nieuwoudtville.
Bulbinella latifolia doleritica	Spikes of deep orange red flowers. Usually still in bloom at Hantam, and
Pulhinalla latifalia danticulata	wild flower reserve, Nieuwoudtville, although over this year. Yellow flowers. Ceres area.
Bulbinella latifolia denticulata Bulbinella nutans	To 1m. Yellow conical racemes of flowers. Leaves to 25mm. Usually
Duioinetta nutans	locally numerous at Nieuwoudtville, e.g. around the guest farm. Many
	fewer in 2017, 2018, and 2019.
Bulbinella nutans turfosicola	Robust spikes of cream flowers. Ceres and Caledon area.
Bulbinella triquetra	To 35 cm. Flowers in subcorymbose to narrowly conical raceme.
	Caledon area and Ceres.
Gasteria brachyphylla	Robertson lunch site, 2018.
Gasteria carinata Gasteria disticha	Several on a low cliff near De Hoop, in good flower.
Gasieria aisticha Haworthia arachnoidea	Probably this in leaf on shale at Worcester Botanic Garden, 2019. Several in fine flower, wild, at Worcester Botanic Garden, and several
Памонтна агастноваей	more rosettes.
Haworthia minima	Rosettes near Napier.
Haworthia pumila	Rosettes, wild at Worcester Botanic Garden.
-	
Kniphofia uvaria	Red Hot Poker. Nieuwoudtville wild flower reserve 2009. Day 10, 2011.
	2012 near Caledon.
Trachvandra have white flowers. Leaves h	basal. All have membranous sheaths at stem base unless otherwise noted.
Trachyandra chlamydophylla	Leaves clumped, linear and erect. Flowers congested in an unbranched
Trachyanara chianiyaophyna	raceme. Waylands, Caledon, and Napier.
Trachyandra ciliata	Leaves channelled, soft and spongy, usually hairy. Flowers in a hairy
	raceme, conspicuous bracts. Cape Point and Observatory.
Trachyandra divaricata	Glabrous. De Hoop and Postberg.
Trachyandra falcata	Robust with leathery sickle-shaped leaves and dense racemes of white
	flowers. West Coast NP. Rather common at Nieuwoudtville.
Trachyandra filiformis	Leaves few and linear, often mottled near base. Flowers in a lax
Tugahugu dug flavifalig	unbranched raceme. Waylands and Tienie Versveld, locally common.
Trachyandra flexifolia	Leaves often undulate, hairy. Nodding flowers in branched raceme. Waylands and Nieuwoudtville.
Trachyandra hirsuta	Stem base without membranous sheaths. To 60cm. Leaves in a fan, soft.
	Peduncle pubescent. De Hoop and Houwhoek.
Trachyandra hirsutiflora	Flowers in a hairy unbranched raceme. Leaves linear and scabrid. Babiana
	ringens site, Houwhoek, Fernkloof, and Rooisand.
Trachyandra muricata	Flowers in branched panicles, nodding. West Coast NP, Ceres, Rooisand
	and Tienie Versveld.
Trachyandra revoluta	Perennial to 90 cm, flowers in divaricate panicle, nodding with recurved
Trachwandra sabulosa	tepals. Cape Point, Darling area, West Coast NP, Ceres area, De Hoop. Rooisand dunes 2013.
Trachyandra sabulosa Trachyandra tortilis	Leaves undulate, flowers nodding. Tanqua Karoo 2013.
Trachyanara tornus	Louves undulute, no wers houding. Fundu Ruloo 2015.
Colchicaceae	
Androcymbium have petal like floral bract	s that enclose the small flowers. Sometimes included in Colchicum.
Androcymbium coloratum	Bracts white. Nieuwoudtville. (A.burchellii, A.latifolium, A.pulchrum)
Androcymbium crispum	Leaves crisped and bristly. Bracts ovate, green or white. Nieuwoudtville wild flower reserve 2018.
Androcymbium eucomoides	Bracts ovate, green or whitish. Cape Point and Houwhoek.
Androcymbium eucomolaes Androcymbium hughocymbion	Bracts leaf-like and acute, small. This species wild in Worcester
	Botanic Garden.
Androcymbium volutare	Leaves narrow and coiled. Bracts ovate and pale green. Several in karoo
	near Calvinia, 2013.

Baeometra uniflora	Orange flowers with reddish reverse and black claw. Scattered records, e.g. Observatory, Kirstenbosch, Waylands, Kogelberg.
Onixotis punctata	Spikes of white flowers. Cape Point, a few in 2014, in a seasonally wet depression.
Onixotis stricta	Aquatic. Spikes of pinkish white flowers. Nieuwoudtville, Bikoes, several in flower.
Ornithoglossum parviflorum Ornithoglossum viride	Dark maroon tepals, nodding. Quiver Tree Forest, in fruit. 2018. Tepals green or purplish with maroon margins, nodding. Several in West Coast National Park.
Wurmbea elongata	Narrow dense spike of green flowers. Citrusdal, new in 2019.
Wurmbea marginata	Spikes of dark purple flowers. One only this year in flower near Napier.
Wurmbea monopetala	Flowers greenish or cream with dark margins. Rooisand 2011.
Wurmbea spicata	Flowers white to cream, sometimes with dark margins. south of Middleberg Pass.
Wurmbea variabilis	Flowers greenish or cream with purple nectaries and sometimes margins. Nieuwoudtville.
Commelinaceae	
Commelina africana	Flowers yellow. Wild in Harold Porter Botanic Garden 2018.
Commelina benghalensis	Flowers blue. This species naturalised at Boulders?
Convallariaceae	
Eriospermum, Cottonseed, are geophyt	tes, leaves and flowers produced at different seasons, leaves often distinctive.
Eriospermum capense	Leaf cordate. Leaves at Waylands, Nieuwoudtville, Caledon, Ceres, De
	Hoop etc.
Eriospermum lanceifolium	Leaf bluish, leathery, laanceolate, margins wavy. In leaf at Houwhoek 2018.
Eriospermum paradoxum	In leaf at Waylands in 2017.
Eriospermum spp.	Leaves at various sites, e.g. Tienie Versveld, Nieuwoudtville waterfall, Ceres.
Cyperaceae Sadly there has been little time to devo	te to sedges! The following have been identified.
Carpha glomerata	Kogelberg.
Cyperus fastigiatus	Cape Peninsula, Waylands.
Cyperus textilis	
Cyperus thunbergii	Rooisand etc.
Cyperus spp.	Others unidentified.
Eleocharis limosa	Nieuwoudtville.

Dioscoreaceae Dioscorea elephantipes

Tetraria brachyphylla

Elephant's Foot. Perennial with impressive exposed armoured tuber. Heartshaped leaves and male flowers in erect racemes, female in nodding spikes. Nieuwoudtville waterfall, and many at Bikoes.

Haemodoraceae

Ficinia anceps Ficinia nigrescens Ficinia nodosa

Ficinia praemorsa Ficinia truncata

Isolepis antarctica

Tetraria thermalis

Isolepis spp.

Tetraria sp.

Hellmuthia membranacea

Dilatris, Bloodroot, has leaves in a dense fan, flowers in a dense rounded or flat-topped panicle.

Nieuwoudtville.

Scattered records.

De Hoop.

De Hoop.

Kogelberg.

Fernkloof.

Cape Agulhas 2018 (PGC). De Hoop 2019.

Probably several different small species seen.

Cape Point, Tulbagh, Betty's Bay, Kogelberg, etc.

Dilatris viscosa	Gone over, Cape Point 2012.
Wachendorfia has pleated leaves, branched Wachendorfia brachyandra	inflorescence of slightly irregular flowers. Apricot flowers. Stamens and style clustered together, to half as long as tepals. West of Clanwilliam.
Wachendorfia multiflora	Flowers dull yellow to brown. Tepals narrow. West Coast NP and Babiana
Wachendorfia paniculata	<i>ringens</i> site. Flowers apricot. Stamens and style spreading, two-thirds to three-quarters as long as tepals. Locally very common, e.g. Caledon, Rooisand, Houwhoek, Waylands, West Coast National Park.
Wachendorfia thyrsiflora	Golden yellow flowers in a spike. In flower at Houwhoek.
Hyacinthaceae Albuca are Ornithogalum like and sometime	es included in that genus. They differ in erect inner tepals, with at least the
inner filaments pinched below.	
Albuca acuminata	Flowers yellow with green keels, inner tepals with hinged fleshy flap. Waylands.
Albuca aurea	Flowers erect, yellow with green keels. In the <i>Watsonia laccata</i> field near Probably this at Swaarmoed Pass, 2019.
Albuca canadensis	To 150 cm, white flowers with green keels, nodding, inner tepals with hinged fleshy flap. Widespread and locally numerous, e.g. Nieuwoudtville, Verloren Vlei, and Waylands. ( <i>Albuca maxima</i> )
Albuca cooperi	Leaves warty basally. Yellow flowers with green keels. Inner tepals hinged at tip. Waylands, Nieuwoudtville, etc.
Albuca flaccida	To 1m. Flowers yellow. Inner tepals with hinged fleshy flap. <i>Babiana ringens</i> site. West Coast NP, Observatory, etc.
Albuca foetida	Bulbous geophyte to 40cm. Flowers yellow with green keels, nodding. Tulbagh, common at one site.
Albuca fragrans	To 1m, flowers in drooping racemes, yellow with green keels. Ceres area 2014?
Albuca grandis	To 1.3m. Leaves fleshy. Flowers yellow-green with green keels. West Coast NP sandy flats and dunes.
Albuca juncifolia	15 to 30 cm, flowers yellow with green keels, drooping. Observatory, Ceres, etc.
Albuca longipes	Regular flowers, erect, white with green keels. Pakhuis Pass 2018.
Albuca namaquensis	Leaves hairy. Flowers nodding, dull yellow with greenish keels. Nieuwoudtville 2014.
Albuca pentheri	Leaves glandular hairy. Pakhuis Pass 2018.
Albuca secunda	Flowers yellow with green keels. Leaves dry at flowering. Possibly seen.
Albuca setosa	Leaves narrow, fleshy. Flowers erect, yellow with green keels. Tanqua Karoo 2014.
Albuca spiralis	Leaves spirally twisted, glandular hairy, flowers green, outer tepals with cream to yellow margins. Worcester Botanic Garden, several, 2018. 2019 this species at Houwhoek?
Albuca suaveolens	Flowers yellow with green keels. Nieuwoudtville, West Coast NP, Verloren Vlei, etc. Possibly other similar species seen too. ( <i>Ornithogalum</i>
Albuca viscosa	<i>suaveolens</i> ). Leaves often spirally twisted above, glandular. Flowers nodding, yellow with green keels. Day 10, 2010.
Albuca is a complex genus and several othe	
Daubenya capensis	A pincushion lily. Yellow flowers. Nieuwoudtville, Hantam, in fruit, 2014.
Daubenya stylosa	A pincushion lily. Probably this numerous in fruit near Bikoes, Nieuwoudtville, 2019.
Dipcadi brevifolium	Tanqua Karoo Aloe falcata site, 2013.
Drimia have leaves often dry at flowering.	
Drimia exuviata	Leaves erect, leathery, and greyish. Flowers rotate, white with green keels. West Coast NP lunch site and Seeberg, several in flower.
Drimia filifolia	Leaves one to many, erect and leathery, to 2mm wide. Hantam and

Drimia media Drimia multifolia	Tulbagh. Leaves firm. In flower Seeberg bird hide, 2014. To 20 cm, coiled filiform leaves. Nieuwoudtville, in fruit on the guest farm. ( <i>Tenichroa multifolia</i> ).
Eucomis regia	Pineapple Lily. Leaves prostrate. Flowers in a greenish leafy spike. Nieuwoudtville wild flower reserve, and waterfall, a few in flower.

*Lachenalia* has leaves often barred or spotted. Flowers in spikes or racemes, lower bracts often reduced, often with sterile upper flowers. Flowers funnel-shaped to tubular, tepals joined below, outer petals often with a swollen, darkly coloured tip.

Having the standard work, 'The Genus Lachenalia' by Graham Duncan, Kew 2012, in the field with us greatly clarified the records of this complex genus.

Lachenalia alba	Leaves 2, white flowers on short to long pedicels. Nieuwoudtville, several in fine flower at one site.
Lachenalia bifolia	Striking nodding red flowers. Over at De Hoop this year. Also many seen at Cape Agulhas (PGC) 2018. ( <i>L.bulbifera</i> )
Lachenalia contaminata	Leaves several, flowers white with brown markings, shortly pedicillate. Usually a few in a damp meadow near De Hoop. Site very dry this year, none seen.
Lachenalia glauca	Apparently this species west of Clanwilliam, 2018 and 2019. Known from several sites further north, but only one in this area.
Lachenalia hirta	Single leaf covered with trichomes. Verloren Vlei.
Lachenalia inconspicua	An individual found in the Tanqua Karoo fitted this species well, particularly in leaf morphology, but out of range. 2013.
Lachenalia judithiae	Heavily blotched scape. Metallic blue flowers. Greyton (PGC).
Lachenalia juncifolia	Juncus-like leaves. Purple marked leaves and stems, long pedicels, anthers exserted. De Hoop and Ceres.
Lachenalia lactosa	Rooisand 2013, a very local endemic.
Lachenalia longibracteata	Leaves 1 or 2, plain or spotted, each flower with a long bract. Near Mamre. West Coast National Park.
Lachenalia lutea	Yellow flowers. Several at Rooisand 2014. Greyton 2018 and 2019 (PGC). Houwhoek 2019 (PGC).
Lachenalia magentea	Similar to <i>L.juncifolia</i> . Larger flowers. Restricted range. De Hoop flats, one, new in 2019.
Lachenalia mediana	Leaves 1 or 2, lanceolate, flowers shortly pedicillate, pale blue and white, with green or purplish markings, anthers included. Many at the Observatory. ssp. <i>rogersii</i> at Tulbagh.
Lachenalia membranacea	Inner tepals have broad translucent white margins. Cederberg lunch site.
Lachenalia mutabilis	1 leaf with undulate margins. Short pedicels, urn-shaped. Brown tips to flowers, anthers slightly protruding. Nieuwoudtville and Cederberg.
Lachenalia neilii	This very local endemic was a great find in fine flower on dolerite in Hantam botanic garden, 2018. Named in honour of Neil McGregor.
Lachenalia obscura	Leaves 1 or 2, suberect, heavily banded green beneath, flowers sessile or subsessile, cream to yellowish-green to brownish blue. Nieuwoudtville.
Lachenalia orchioides	Leaves 1 or 2, plain or densely spotted, flowers sessile, shortly cylindrical greenish yellow or blue. South of Middleberg Pass, Ceres area, Caledon, Rooisand, and Houwhoek.
Lachenalia pallida	Leaves 1 or 2, flowers cream to dark yellow with brown or green markings. Locally common, Mamre, Waylands, Tienie Versveld, Ceres.
Lachenalia punctata	Over at Babiana ringens site. (L.rubida)
Lachenalia pusilla	Over at Nieuwoudtville waterfall.
Lachenalia stayneri	This very local endemic was wild in Worcester Botanic Garden, 2018.
Lachenalia suaveolens	White margined flowers heavily carnation-scented. Common at Nieuwoudtville.
Lachenalia trichophylla	Leaf single, heart-shaped, with stellate hairs on upper surface and margin, flowers yellow with green markings. Cederberg lunch site 2012.
Lachenalia unicolor	Two densely pustulate leaves, flowers on long pedicels, anthers exserted. Day 8, 2012.

Lachenalia unifolia	Leaf single, linear, banded with green and maroon. Flowers variable, anthers included. Waylands and Tienie Versveld.
Lachenalia variegata	Leaf single, margins thickened and undulate. Flowers shortyly pedicillate, greenish-grey with variously coloured markings. One at the <i>Babiana ringens</i> site.
Lachenalia violacea	Leaves 1 or 2, lanceolate, plain or heavily spotted. Flowers on long pedicels, bluish green at base, with purple tips. Anthers exserted. Nieuwoudtville 2011. 2012 near Clanwilliam. 2013 and 2014 Knervslakte.
Lachenalia zebrina	Leaves and lower stems strongly patterned in purple. Fine in Tanqua Karoo 2013.
Massonia has a sessile inflorescence between	en leaves that are appressed to the ground.
Massonia depressa	Leaves often spotted. Leaves at Nieuwoudtville waterfall, Hantam, and wild flower reserve.
Massonia echinata	Small. Little Karoo at Tradouw's Pass, 2009. Over at De Hoop.
Massonia pustulata	Leaves strongly pustulate. Several in fruit in the dunes at De Hoop.
Ornithogalum concordianum	Coiled leaves. Flowers yellow with green keels. Tanqua Karoo 2013.
Ornithogalum dubium	Orange flowers. Very common at one site at Tulbagh.
Ornithogalum hispidum	10 to 40 cm, bracts small, flowers white. Several at Worcester Botanic
	Garden.
Ornithogalum maculatum	Short, flowers orange or yellow, outer tepals often with a dark tip. West Coast NP, Nieuwoudtville, Cederberg.
Ornithogalum multifolium	Very small examples, pale yellow flowers, West Coast NP (and Pakhuis Pass in 2018).
Ornithogalum nannodes	Leaves of this species at Nieuwoudtville. Very small plant. 2009.
Ornithogalum polyphyllum	Flowers white with green keels, fragrant. Botterskloof Pass.
Ornithogalum strictum	In bud at Hantam. In flower near Clanwilliam.
Ornithogalum thyrsoides	Showy white flowers. Darling area, Nieuwoudtville, Rooisand, Tulbagh.
Ornithogalum xanthochlorum	Robust with pale green flowers. Tanqua Karoo, rather common at one site 2013.
Ornithogalum sp.	Pakhuis Pass.
Polyxena ensifolia	To 5cm, 2 leaves. In fruit at Nieuwoudtville.
Veltheimia capensis	Sand Lily. Robust with impressive inflated fruits. In fruit at
-	Nieuwoudtville wild flower reserve.
Whiteheadia bifolia	Pagoda Lily. Leaves prostrate, white flowers in a dense conical spike. In flower at Nieuwoudtville waterfall, and at Pakhuis Pass.
Hypoxidaceae	
Empodium plicatum	Leaves near Napier, 2012.
Empodium sp.	Autumn Star. Leaves at Nieuwoudtville 2009.
Spiloxene has yellow, orange, or white star-	-shaped flowers
Spiloxene aquatica	White flowers, in pools. Nieuwoudtville 2019, also Ceres and Napier in
sphonene aquanca	2018.
Spiloxene canaliculata	Flowers yellow or orange with dark centre. Leaves u-shaped in cross section. A few at Tienie Versveld, in poor condition this year.
Spiloxene capensis	Flowers yellow or white, centre usually iridescent blue or green. Leaves v-
	shaped in cross section. Scattered records, e.g. Waylands, Ceres, Rooisand, Napier, Caledon, Kirstenbosch.
Spiloxene flaccida	Yellow flowers, more than 1 per scape. Harold Porter Botanic Garden 2018.
Spiloxene ovata	Flowers yellow or white, 1 per scape. One bract. West Coast NP, Ceres,
1	Rooisand, Cape Point, etc.
Spiloxene serrata	Flowers white or yellow, 1 per scape. Two bracts. Waylands etc.
<i>Spiloxene</i> sp.	An orange flowered species that fits none of the described species was seen
. 1	at Postberg, West Coast NP, 2011 and 2012.

Iridaceae

Aristea have actinomorphic blue flowers. Fewer than usual in flower this year. Aristea africana Spathes and bracts fringed more than half their length. Cape Point, Ceres, De Hoop, Kogelberg, Houwhoek. To 1m. Many in fruit at Kirstenbosch. (= A.macrocarpa). Aristea bakeri Large flowers with paired membranous tissue above base of tepals. Usually Aristea biflora a few in fine flower near Caledon where a local endemic. Not seen 2018 or 2019. Aristea capitata In fruit at Fernkloof, 2019. Aristea glauca Forms low cushions with blue flowers. In flower De Hoop coastal flats, 2014 Aristea pusilla Stem flattened and two-winged. Near Napier 2014. Aristea spiralis Very large white or pale blue flowers. Houwhoek. Aristea sp. A branched species on Betty's Bay roadsides, 2019.

 Babiana has pleated leaves. Stems, leaves, or bracts hairy. Flowers usually blue to violet. Reference: 'A revision of the southern African genus Babiana, Iridaceae:Crocoideae' by Peter Goldblatt and John C.Manning, Strelitzia 18, 2007.

 Babiana ambigua
 Flowers blue to mauve with white to cream markings. Usually at Cape

 Private View of the southern of the southern of the southern African genus Babiana, Iridaceae:Crocoideae' by Peter Goldblatt and John C.Manning, Strelitzia 18, 2007.

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 Flowers blue to mauve with white to cream markings. Usually at Cape

 Divid Word Coast VID and Divid Coast VID and Divid View of Calendary Tracing View o

Point, West Coast NP and De Hoop. Only at Tienie Versveld this year. Babiana angustifolia Dark blue flowers, inverted, 'lower' tepals with black markings. Damp areas at Tienie Versveld. Also at Observatory this year, and Darling. Babiana ecklonii Stem erect and well developed. Flowers violet with dark blue and cream markings. South of Nieuwoudtville, 2018. Babiana fourcadei Flowers mauve with yellow and violet markings. Near Honeywood 2009. Babiana fragrans Bain's Kloof Pass, 2017. Babiana framesii Flowers dark blue to purple with white markings, tube curved. Nieuwoudtville dolerite, wild flower reserve. Babiana hirsuta A superb colony of this striking red flowered species in dunes north of Veldriff. A fine show this year, abundantly in flower. (B.thunbergii). Babiana lineolata To 25cm and often branched. Pale blue with yellow markings. Ceres, locally common. Fragrant mauve flowers with yellow markings. Gone over at Babiana minuta Nieuwoudtville, in rock crevices at the waterfall. Flowers mauve with yellow and purple markings. Filaments unequal. Babiana montana North of Cape Agulhas, 2018 (PGC). Babiana mucronata Flowers pale blue with white to yellow markings, scented. Middleberg Pass. Babiana nana ssp.nana Flowers blue or purple with white markings. Babiana ringens site. Babiana nana ssp.maculata Narrow leaves. Cape Point. Babiana patersoniae Flowers white to pale blue to mauve with yellow markings, fragrant. Napier. Short. Flowers mauve to blue with yellow markings. Very strongly Babiana patula fragrant. Near De Hoop (2018), and Napier. Babiana praemorsa This species on dolerite at Hantam? These plants appear to be hybrids between this and Babiana framesii. Pink to purple fragrant flowers, filaments arched, anthers arrow shaped. Babiana purpurea A few in the Caledon area. Main spike axis sterile. Flowers red at ground level. Highly adapted for Babiana ringens sunbird pollination. Several in fine flower on roadside near Mamre. Flowers actinomorphic, blue with red centre. Very common at Waylands. Babiana rubrocyanea Babiana sambucina Flowers mauve to violet with white markings, tube straight. Nieuwoudtville and Ceres area. Babiana scariosa Stem erect and branched. Flowers mauve and yellow. Resembles a Gladiolus. Gannaga Pass 2009. Babiana spathacea A distinctive species, in flower in Hantam, new in 2019. Babiana stricta Flowers weakly zygomorphic, blue, white or yellow. Satyrium coriifolium site in Breede River Valley (2011), burn site near Worcester, and Rooisand 2013. 2014 numerous in fine flower at Bain's Kloof Pass. 2017 Franschhoek Pass. 2019 Greyton (PGC). Similar to the following species, less robust. Flowers uniformly white or Babiana tubiflora cream except for small red markings on lower tepals, slender perianth tube

	widens only near apex, filaments 13-16mm. Sands, West Coast NP and
	Babiana ringens site.
Babiana tubulosa	Flowers white to cream, pink on outside, perianth tube widened for 10-
	21mm, filaments 20-22mm. Postberg 2017.
Babiana vanzyliae	Flowers yellow. A few at Nieuwoudtville.
Babiana villosa	Actinomorphic pink to dark red flowers. Just still in flower at Tulbagh.
Babiana virginea	Flowers white, or blue and yellow. Common at one site near the lodge
	at Gannaga Pass 2009. A local endemic of the Roggeveld Escarpment.

*Bobartia* has long cylindrical leaves, yellow flowers in a terminal head, enclosed by a dry spathe, flowers lasting less than a day.

Bobartia gladiata	Rush Iris. Leaves elliptical in cross section. In fruit at Cape Point. In flower Kogelberg.
Bobartia longicyma	Leaves round in cross section. Tepals free to the base. Kogelberg 2012.
Bobartia macrospatha	Leaves round in cross section. Short perianth tube. Several in flower on De Hoop limestone.
Chasmanthe aethiopica	In fruit De Hoop dunes, 2019.
Chasmanthe floribunda	Orange-red flowers in two-ranked spike. In fruit, West Coast NP.
Dietes iridioides	Observatory, not wild.
Ferraria, Spider Irises, have dull c	oloured flowers with crinkled margins and fringed style crests.
Ferraria crispa	Flowers brown. Several fine examples West Coast NP (and near De Hoop 2018).
Ferraria densepunctulata	Flowers greenish to grey, speckled with blue. North of Veldriff, in bud.
Ferraria divaricata	A few at Ceres.
Ferraria kamiesbergensis	Flowers cream, yellow, or greenish, often with darker spots on the tepal claws. Tanqua Karoo 2011.
Ferraria uncinata	Flowers yellow to purple. Clanwilliam area, and Cederberg lunch slope. 2012.
Ferraria variabilis	Nieuwoudtville dolerite, not in flower.
Francia has sword-shaped leaves w	with a raised midrib, the tips often blunt or rounded. Flowers in a 1-ranked horizontal

*Freesia* has sword-shaped leaves with a raised midrib, the tips often blunt or rounded. Flowers in a 1-ranked horizontal scalloped spike. Green or dry bracts.

Flowers white, often mauve on the outside. This or similar at the
observatory, where introduced. 2014.
Flowers yellow or cream with yellow markings. Near Napier 2011.
Flowers cream with yellow markings. De Hoop 2010 and 2011. Common
near Agulhas 2018 (PGC).
Flowers creamy white and yellow. Tanqua Karoo, 2011.

*Geissorhiza* has leaves usually with a midrib and thickened margins, flowers usually actinomorphic. Bracts green and soft. Style divided above the level of the anthers into short recurved branches. *Geissorhiza aspera* Spike of blue flowers. Cape Town Observatory, West Coast National Park,

- 1	Tulbagh, and Houwhoek.
Geissorhiza bryicola	White flowers and unequal stamens on wet rocks at Fernkloof.
Geissorhiza divaricata	Flowers small, white to pale mauve, dark mauve on reverse.
	Nieuwoudtville waterfall.
Geissorhiza eurystigma	Flowers deep blue with a red centre. Waylands, several fine examples.
Geissorhiza heterostyla	Leaf margin strongly thickened. Flowers blue to purple, stamens with one
	shorter filament. Nieuwoudtville waterfall.
Geissorhiza hispidula	Flowers small, cream or white. Leaves sticky, often hispid. Rooisand.
Geissorhiza humilis	Leaf margins and midrib thickened and sticky. Flowers yellow.
	Houwhoek, new in 2019.
Geissorhiza imbricata	Flowers white to yellow. Rooisand 2018.
Geissorhiza inaequalis	Leaf margin lightly thickened. Flowers pale blue, stamens with one shorter
	filament. Nieuwoudtville wild flower reserve.
Geissorhiza inflexa	Red or purple flowers. 1 at Tulbagh.
Geissorhiza juncea	Small cream to yellow flowers. Several at Waylands, yellow flowers.
Geissorhiza monanthos	Flowers dark blue with pale centre edged with a dark ring. Waylands and

	Tienie Versveld, common.
Geissorhiza nana	Flowers white and tiny, mostly one per spike. Near Napier 2011. 2012 between Napier and Caledon. 2014 Rooisand.
Geissorhiza ornithogaloides	Flowers yellow. Ceres, and south of Middleberg Pass.
Geissorhiza ovata	Flowers white, deep pink on reverse. Cape Point, Houwhoek, Fernkloof.
Geissorhiza radians	Flowers deep blue violet, with red centre edged with white. Numerous at Waylands, in very fine flower. A few at Tienie Versveld.
Geissorhiza ramosa	Blue flowers, branched, one filament shorter than others. Several at Kogelberg, new in 2019.
Geissorhiza schinzii	Large pink flowers with darker veins. Many in fine flower at Houwhoek.
Geissorhiza similis	Small white flowers. Cape Point coast stop.
Geissorhiza splendidissima	Flowers blue with black centre. Nieuwoudtville, several in fine flower.
Geissorhiza sulphurascens	Flowers white to cream. Nieuwoudtville 2018.
Geissorhiza tulbaghensis	Flowers white with a dark centre. Tulbagh 2013.
Geissorhiza spp.	Others at Fernkloof.
Gladiolus has leaves usually with a definate	midrib, inflorescence a spike of usually zygomorphic flowers.
	Flowers large, orange with yellow on lower tepals. Usually scattered
	records, e.g. near Darling, West Coast, Tulbagh. This year only at Tulbagh and Ceres.
	Blue and yellow flowers. Fernkloof, new in 2019.
	Flowers blue and yellow. 1 at the Babiana ringens site.
	Flower white with strong pink markings. In fine flower at Kogelberg
	and Betty's Bay.
Gladiolus caryophyllaceus	Pubescent leaves. Large pink to mauve, speckled, fragrant flowers. South of Nieuwoudtville, 2018.
Gladiolus ceresianus	Short. Flowers dull purplish with erect dorsal tepal. c.5 on Ceres burn slopes 2018.
Gladiolus cunonius	Upper tepal elongate, bright red, lower tepals small and green. A few at De Hoop, and Betty's Bay.
Gladiolus debilis	Flowers white with red markings. Fine at Houwhoek and Kogelberg.
Gladiolus hirsutus	Flowers pink. Fernkloof and Houwhoek. One north of Ceres.
Gladiolus hyalinus	Flowers long tubed, brownish to cream with dark speckles.
Gladiolus liliaceus	Flowers large, brown. Turn mauve and become intensely fragrant in evening. Caledon to Napier, usually locally common. Remarkably not seen 2019.
Gladiolus maculatus	Brown flowers. Ceres burn site.
Gladiolus meliusculus	Flowers bilabiate, pink to orange with with black and greenish markings. A few at Waylands.
Gladiolus merianellus	Orange and yellow tubular flowers. Cape Point burn, new in 2018. In fruit 2019. ( <i>Gladiolus bonaspei</i> ).
	Flowers greenish to purple with dark purple markings on lower tepals. 2 in fine flower at Seeberg.
	Pink flowers with white and red markings. Cape Point, 2018.
Gladiolus permeabilis	Flowers windowed in profile. 1 at De Hoop 2018.
	Leaves x-shaped in cross section. Flowers red. Ceres area, just one this year.
Gladiolus recurvus	North of Ceres, white and yellow forms.
Gladiolus rogersii	Flowers blue with yellow markings on lower tepals. 2 at Grootvadersbosch 2009.
Gladiolus scullyi	Flowers dull yellow to light brown. Nieuwoudtville, at several sites.
Gladiolus speciosus	Flowers like <i>G.alatus</i> but upper tepal hooded. Fine south of Nieuwoudtville, and Tulbagh, 2018.
	Red flowers. 1 by culvert at Nieuwoudtville, 2014.
Gladiolus trichonemifolius	Leaves four-grooved. Actinomorphic yellowish flowers. In fruit at Rooisand.
	Flowers cream with brown shading. De Hoop area, locally common, and Bredasdorp to Napier, 2018.
Gladiolus uysiae	Flowers bilabiate, brownish purple. Nieuwoudtville, on the farm.
Gladiolus venustus	Flowers purple with yellow markings on lower tepals. Nieuwoudtville.
Gladiolus virescens	Yellow and pink flowers. In fine flower near Napier 2018.

Gladiolus watermeyeri	Flowers large, pearly grey with dark veins, lower tepals green. 1 at Nieuwoudtville, lunch site on first day, 2012.
<i>Hesperantha</i> flowers usually actinomorp long filiform branches.	hic, often opening late afternoon. Style divides at the mouth of the tube into
Hesperantha bachmannii	Flowers white and nodding. Nieuwoudtville wild flower reserve and
Hesperanina bachmannii	Flowers white and nodding. Nieuwoudtville wild flower reserve and Ceres.
Hesperantha brevifolia	Leaves short. Flowers white, red on reverse. Bain's Kloof Pass, 2014.
Hesperantha cucullata	Flowers white, red outside. Nieuwoudtville.
Hesperantha falcata	Flowers white or yellow, outer tepals red on outside. Scattered records,
nesperanna jaicaia	e.g. Caledon and Tulbagh.
Hesperantha juncifolia	Flowers white, pink on outside. De Hoop 2011.
Hesperantha jancifora	Flowers pink. Nieuwoudtville, Bikoes.
Hesperantha pilosa	Leaves hairy on margins, midrib, and secondary veins.
nesperanina pilosa	Nieuwoudtville and Ceres. Not seen 2017, 2018, or 2019.
Haspergetha pseudopilosa	
Hesperantha pseudopilosa	Leaves hairy on margin and midrib. Flowers white, green or brown on reverse. This species Ceres pm 2012?
User sugath a nadiata	Flowers white, nodding, outer tepals red on outside. Nieuwoudtville.
Hesperantha radiata	Flowers white, brown on reverse. Nieuwoudtville culvert 2018.
Hesperantha rivulicola	
Hesperantha vaginata	Flowers large, cup-shaped, yellow with brown markings. Nieuwoudtville,
	a few in one area of Hantam botanic garden.
<i>Ixia</i> has actinomorphic flowers, with pale	e or rust coloured bracts, membranous or dry, on wiry stems.
Ixia capillaris	Flowers white to mauve. Ceres.
Ixia dubia	Orange to yellow flowers with dark centre, bracts translucent pink.
	Tienie Versveld.
Ixia erubescens	Distinctive crisped leaves, flowers pink. Tulbagh 2013.
Ixia flexuosa	Pink or white flowers with a slight musky odor. Near Napier, and
παγιελιού	Caledon.
Ixia fucata	Franschhoek Pass, 2017.
Ixia latifolia	Leaves relatively broad. Flowers pink. Ceres.
Ixia longituba	Beautiful long-tubed pink flowers. Napier.
Ixia maculata	Flowers orange to yellow with dark star-like centre. Waylands.
Ixia micrandra	Flowers pink with filiform tube. De Hoop and Fernkloof.
Ixia polystachya	Dense spikes of white to pink flowers. Numerous at one site at Rooisand
1 5 5	2011.
Ixia purpureorosea	Flowers mauve-pink with a blackish centre. In fine flower at Postberg
I I I I I I I I I I I I I I I I I I I	2018, a Saldanha Bay endemic.
Ixia rapunculoides	Blue funnel shaped flowers. Nieuwoudtville.
Ixia scillaris	Flowers pink with filiform tube. Many at Citrusdal.
Ixia versicolor	Linear twisted leaves. Flowers white or purple with dark centre.
	Rooisand 2011.
Langirousia has corrugate or leathery les	wes. Flowers zygomorphic or actinomorphic.
	atics and Biology of <i>Lapeirousia</i> , <i>Codonorhiza</i> , <i>Psilosiphon</i> and Goldblatt and John C Manning, Stralitzia 35, Sanhi 2015
	Goldblatt and John C.Manning, Strelitzia 35, Sanbi 2015.
Lapeirousia divaricata	Short-tubed white to pale pink flowers. South of Nieuwoudtville, 2018.
Lapeirousia fabricii	Flowers large, cream to pink with red markings. Botterskloof and Citrusdal.
I anairousia jacaujnji	
Lapeirousia jacquinii	Short, leaves ribbed, flowers zygomorphic, purple with whitish streaks on lower tepals. Waylands, Cederberg, Nieuwoudtville etc.

Lapeirousia oreogena

Lapeirousia pyramidalis

Lapeirousia violacea

Melaspherula ramosa

Fairy Bells. Numerous cream flowers on delicate much branched stems. Kirstenbosch, Boulders, Waylands, West Coast NP, Ceres, Nieuwoudtville,

Short, leaves ribbed, flowers actinomorphic, violet with cream

and black markings in centre. Many in fruit at Nieuwoudtville wild

Flowers cream to bluish and scented. Plants reddish. Robertson lunch site

Flowers long-tubed, violet with dark red markings on lower tepals. 3 at

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Papkuilsfontein old burn site, 2018.

flower reserve.

2018.

Micranthus alopecuroides Micranthus junceus	Cape Point, etc. Leaves sword-shaped with distinct midvein. Houwhoek 2012, over, Leaves 3-6 mm diameter at Nieuwoudtville 2009.
Micranthus tubulosus	Leaves 8-14 mm diameter. Gone over, Ceres, 2012.
Moraea have either iris-like flowers with u	nequal tepals, or with all tepals more or less equal.
Moraea angusta	Stem nodes sticky. Tepals unequal, yellow. <i>Watsonia laccata</i> meadow, Grootvadersbosch to De Hoop 2009. Ceres pm 2012. Worcester burn site 2012 and 2013.
Moraea anomala	Tepals unequal, yellow with darker yellow nectar guides. Clanwilliam botanic garden car park 2009! Day 5 also 2010. Houwhoek 2017. Kogelberg 2019.
Moraea aristata	Flowers white with dark blue to emerald nectar guides, the outer tepals much larger. Going over this year at the Cape Town Observatory, its only remaining station. Fewer seen than is usual.
Moraea aspera	Leaves loosely coiled. Flowers salmon. A few in flower at one site near Nieuwoudtville, many in fruit. ( <i>Homeria spiralis</i> ).
Moraea barnardii	2 of this fine very local endemic were seen at Shaw's Pass, 2014.
Moraea bellendenii	Outer tepals much large than inner, yellow. A few in good flower at Napier.
Moraea bifida	Very similar to <i>Moraea miniata</i> but with a single leaf. Abundant at Nieuwoudtville. Usually salmon, but yellow form seen too.
Moraea bituminosa	Yellow flowers enclosed in fibrous scales. Waylands 2018.
Moraea brachygyne	Small pink flowers with yellow, speckled centre. Van Rhyn's Pass.
Moraea bulbillifera	Stems often with bulbils at nodes. De Hoop flats.
Moraea cantharophila	Flowers white or cream, inner tepal claws with dark central streak, style crests yellow to salmon, tepals unequal. Kogelberg 2011.
Moraea ciliata	Very short with blue iris like flowers. Blue form near Gydo Pass, yellow form near Caledon, 2018.
Moraea collina	Stem flexed outwards above leaf sheath. Yellow flowers, subequal tepals. Houwhoek.
Moraea cookii	Yellow flowers. Englishman's Grave.
Moraea demissa	Small yellow flowers. Middleberg Pass, 2018.
Moraea falcifolia	Acaulescent cormous geophyte. Flowers white with yellow nectar guides on outer tepals and purple marks on inner tepals. A few at Ceres in 2018.
Moraea fenestrata	Tepals subequal, salmon or yellow, with tepal claws narrowed at the base forming a windowed floral cup. Near Nieuwoudtville, and Tanqua Karoo, 2014.
Moraea filicaulis	A slender form of <i>M.fugax</i> now treated as a full species. Day 5 lunch site.
Moraea flaccida	Single leaf. Flowers salmon with yellow centre, or entirely yellow, tepals subequal. Houwhoek and Napier, 2018.
Moraea fugacissima	Stemless, yellow flowers, tepals subequal. Cape Point 2017.
Moraea fugax	Tepals unequal, yellow or blue. Scattered records, De Hoop, Tulbagh, West Coast NP, Tienie Versveld, Waylands.
Moraea galaxia	Short, yellow flowers. 1 at Ceres.
Moraea gawleri	Small iris like flowers. Waylands (brick red), Ceres (yellow), West Coast NP, Kirstenbosch, Tulbagh, etc.
Moraea inconspicua	Flowers small, yellow to brown or cream, tepals unequal. Nieuwoudtville 2010.
Moraea lewisiae	Yellow flowers. Several near Caledon.
Moraea longistyla	Leaf single, tepals subequal, yellow or salmon. South of Middleberg Pass, and Ceres area.
Moraea lugubris	Short, leaves 2, Flowers deep blue with yellow nectar guides, iris like. Rooisand.
Moraea macronyx	Stemless, unequal tepals, white and yellow flowers. South of Middleberg Pass, and several in Ceres area, 2018.
Moraea marlothii	A tall species with a broad single leaf (and yellow flowers), several in leaf at Papkuilsfontein.
Moraea miniata	Tulp. Leaves 2 or 3. Flowers salmon or yellow. Widespread and locally numerous, e.g. Kirstenbosch, Cape Town Observatory, West Coast National Park, south of Middleberg Pass, and Nieuwoudtville.

Moraea minor	Leaf single. Flowers yellow or salmon. Tepal claws form a cup that
	includes stamens. Babiana ringens site.
Moraea neglecta	Tepals unequal, yellow with darker stippling on outer tepals. Several at
	Cape Point.
Moraea ochroleuca	Leaf usually single. Flowers yellow to orange and foetid. One at Cape
	Point 2018.
Moraea odorata	Nieuwoudtville, Hantam and wild flower reserve dolerite. All over this
	year. ( <i>M.fragrans</i> ).
Moraea papilionacea	Leaves hairy. Flowers yellow or salmon. Day 10, 2010. 2012 PGC before
	group.
Moraea polyanthos	Blue flowers, subequal tepals. Near De Hoop, on roadsides, but not seen
	2017, 2018, or 2019.
Moraea pritzeliana	Coiled leaves. Nieuwoudtville, wild flower reserve, Hantam, and on the
	guest farm.
Moraea pseudospicata	Leaf single. (Small violet flowers with orange nectar guides.)
	Nieuwoudtville, in leaf.
Moraea serpentina	Leaves twisted or coiled. Flowers white and yellow, flushed violet. Many
	in Knervslakte, 2012.
Moraea setifolia	Small mauve flowers with orange and white nectar guides. De Hoop
	and Tulbagh.
Moraea speciosa	Flowers blue with a pale cup. Gone over, Tanqua Karoo, 2014.
Moraea tricolor	Short. Variable flower colour, tepals unequal. 1 at Waylands 2018.
Moraea tricuspidata	Flowers white to cream. Rooisand 2011. 2014, 1 at Cape Point.
Moraea tripetala	Inner tepals reduced to a short tooth. Flowers blue to violet. Variable,
	widespread and locally numerous, e.g. Waylands, Tienie Versveld, De
	Hoop, Nieuwoudtville (abundant), Napier, and Ceres.
Moraea tulbaghensis	Orange flowers. One of the finds of the trip in 2013 was 21 in bloom near
-	Tulbagh at what was a new site for this now very scarce species. 2014 at
	the same site, although flowers going over. 2017 at the same site, many
	in fruit, a few still in flower. 2018, a few in flower. Gone over in 2019.
Moraea unguiculata	Houwhoek and Kogelberg.
Moraea vallisbelli	Short, single leaf, tepals subequal, flowers yellow or pink with darkly
	outlined yellow nectar guides. Nieuwoudtville.
Moraea variabilis	Stemless, with purple to mauve flowers. Ceres, 2018, a local endemic.
Moraea vegeta	Tepals unequal and of a distinctive dull purple brown. Several in one area
at	
	the Observatory, most in fruit this year but two flowers still fine.
Moraea villosa	Very showy with three large purple outer tepals with dark markings. Fine
	at two sites near Ceres, superb examples.
Moraea virgata	Yellow flowers. Cape Point roadsides 2009.
0	1
Nivenia corymbosa	In fruit at Bain's Kloof Pass, 2014.
Nivenia stokoei	Bush Iris. Woody. In fruit at Kogelberg, 2012.
Romulea are often acaulescent, with actino	morphic flowers. A large genus, many are impossible to identify without
examining corm characters.	
Romulea cruciata	Magenta with dark blotches around yellow centre. Waylands and Ceres.
Romulea eximia	Flowers rose or red with dark blotches around the greenish or yellow cup.
	Darling area 2010.
Romulea flava	Yellow flowers. Cape Point 2018.
Romulea hirsuta	Flowers pink with dark marks around the yellow cup. Darling area, locally
	common.
Romulea hirta	Pale yellow flowers, sometimes with chestnut blotches at edge of cup.
	Nieuwoudtville 2018.
Romulea leipoldtii	Flowers cream with yellow cup. Recorded 2011?
Romulea monadelpha	Flowers red with black and silvery markings in cup. Nieuwoudtville,
	dolerite at Hantam, superb at one site 2014. Not seen 2017 or 2018. One
	in 2019.
Romulea montana	Flowers yellow, darker in the throat. Nieuwoudtville 2018.
Romulea multisulcata	Yellow flowers, seasonal pools. Nieuwoudtville, Bikoes, 2018.
Romulea rosea	Flowers pink to magenta. Widespread. Size very variable, the small white
	r

	flowered var. <i>australis</i> seen at various sites.
Romulea sabulosa	Flowers dark red, with black blotches in green cup. Nieuwoudtville 2012.
Romulea sphaerocarpa	Flowers yellow with brown markings.
Romulea tabularis	Flowers blue with yellow cup. Tienie Versveld 2019, and Rooisand coast (2018).
Romulea tortuosa	Flowers yellow with darker markings in the throat. Ceres third burn site 2009.
<i>Romulea</i> spp.	Several others were not identified.

Sparaxis have dry and papery or crinkled and solid bracts, streaked with darker flecks, and flowers on firm fleshy stems.

Sparaxis bulbifera	Flowers subactinomorphic, creamish. Wetter parts of Waylands, and Tienie Versveld. Also Somerset West roadsides on the last day.
Sparaxis elegans	Flowers actinomorphic, salmon with purple and yellow centre. A
	beautiful species. Nieuwoudtville, many in fine flower.
Sparaxis grandiflora	Flowers subactinomorphic.
	ssp.fimbriata, lawns at observatory in Cape Town.
	ssp.violacea Rooisand.
	ssp.grandiflora at Tulbagh, 2013.
Sparaxis metelerkampiae	Flowers zygomorphic and bilabiate, violet marked with white.
	Cederberg.
Sparaxis pillansii	Another beautiful actinomorphic species at Nieuwoudtville, Hantam,
	several in fine flower, 2014.
Sparaxis tricolor	Flowers actinomorphic, orange scarlet, with yellow centre edged black.
*	A beautiful species. Abundant at one site near Nieuwoudtville.
Sparaxis villosa	Flowers zygomorphic, yellow and violet. Tulbagh, in fruit, 2018.

Tritoniopsis dodii Cape Peninsula 2010. (?)

*Watsonia* have spikes of two-ranked numerous pink, orange, or red flowers. 'The Genus Watsonia' by Peter Goldblatt, 1989, is the standard work

Lanaria lanata

'The Genus Watsonia' by Peter Goldblatt,	1989, is the standard work.
Watsonia aletroides	Narrow tubular red flowers. Usually near De Hoop, Napier and Napier to
	Caledon roadsides, and Caledon. Many fewer than usual this year.
Watsonia coccinea	Short with pink flowers. 2 at Cape Point.
Watsonia laccata	Flowers pink. Common in one field between Grootvadersbosch and De
	Hoop 2009. Rooisand 2011. Cape Agulhas 2018 (PGC).
Watsonia marginata	Leaves broad, flowers pink, actinomorphic. Houwhoek area and
	Kogelberg.
Watsonia meriana	Tall, Flowers red to orange. Houwhoek, Caledon area, and Kogelberg.
Watsonia spectabilis	Flowers large and scarlet. Roadsides Stanford to Hermanus 2009.
Watsonia tabularis	In flower at Cape Point, from the vehicle, flowering rather early. 2018.
Watsonia zeyheri	Flowers bright orange, tube elongate. 1 at Cape Point 2017.
Witsenia maura	Bokmakieriestert. Woody shrub, spreading. Cape Point, not in flower
	2012. Only a few specimens are known.
Xenoscapa fistulosa	Fairy Pipes. Very small plant with zygomorphic white flowers. Citrusdal
	and Ceres.
Juncaceae	
Juncus acutus	
Juncus kraussii	
Juncus punctorius	
Juncaginaceae	
Triglochin bulbosa	Bulbous Arrow-grass. Waylands, Tienie Versveld and West Coast NP.
Triglochin spp.	Others possibly seen. 5 species occur.
<b>y</b> .	
Lanariaceae	

At several sites this year, e.g. Houwhoek, Kogelberg.

#### Orchidaceae

For the 2012 tour Callan and I both obtained pre-publication copies of the superb and major new 'The Cape Orchids', by William R.Liltved and Steven D.Johnson, Sandstone Editions, 2012. More suitable for use in the field is the excellent 'Orchids of South Africa, A Field Guide', by Johnson, Bytebier, and Starker, Struick 2015.

Bartholina burmaniana	Spider Orchid. Lip much divided into narrow linear lobes. c.5 in fine flower at Ceres.
Bonatea speciosa Corycium bicolorum	Green Wood Orchid. Robust with green and white flowers. Day 13, 2010. Robust, leaves and stem marked with purple at base. In bud Cape Point, 2018.
Corycium crispum	Leaf margins crisped. Flowers yellow with green lip appendage. 3 south of Nieuwoudtville 2018.
Corycium ingeanum	Similar to <i>C.orobanchoides</i> . Nieuwoudtville, where a Bokkeveld Plateau endemic. Described as recently as 1986.
Corycium orobanchoides	Flowers yellow green with purple petal apices. Locally common, e.g. Darling area, West Coast NP, Ceres, Worcester, Tulbagh.
Disa bifida	Pink flowers with ascending spur, spotted leaves. Houwhoek 2019 (PGC). ( <i>Schizodium bifidum</i> ).
Disa biflora	Pinkish white flowers with narrow sepals. A few at Ceres. ( <i>Schizodium cornutum</i> )
Disa bracteata	Flowers in dense raceme, green with maroon tinted sepals, spur pendent. A few records late in the tour. ( <i>Monadenia bracteata</i> )
Disa flexuosa	Yellow and white flowers. Several at Ceres. New in 2019. ( <i>Schizodium flexuosum</i> ).
Disa obliqua	Pink flowers. 1 at Cape Point 2018. (Schizodium obliquum)
-	
Disa spathulata	Lip spathulate. 2 west of Clanwilliam. 1 at Ceres. 2018.
Disperis bolusiana	Single yellowish green or white flower. Ceres.
Disperis capensis	Single flower, green and magenta, sepals tailed, lip limb curled downwards. 2 at Cape Point 2012. 1 Cape Peninsula and 1 at Shaw's Pass, 2014. Greyton 2018 (PGC).
Disperis circumflexa	Flowers greenish and white. Nominate, a few at Ceres.
Disperis villosa	1 to 4 yellowish green flowers. Waylands, Ceres, etc.
	Plant hairy. Sepals green, petals white. Nieuwoudtville waterfall.
Holothrix aspera	
Holothrix cernua	2 basal leaves stiff hairy or scaly. Petals green. Houwhoek.
Holothrix mundii	c.5 in De Hoop dunes, new in 2019.
Holothrix secunda	2 basal fleshy leaves. Sepals green, petals cream, entire, and fleshy. Many at Englishman's Grave.
Holothrix villosa	Plant hairy. Flowers green. A few at Ceres, Cederberg, Nieuwoudtville.
Liparis capensis	2 to 3 ovate and spreading leaves. Gone over at Cape Point, <i>Watsonia coccinea</i> site, 2011. In bud at Ceres 2014.
Monadenia atrorubens	Flowers beetroot red. Rooisand 2011. (Disa atrorubens)
Monadenia rufescens	Flowers lime green with purple petals. Cape Point 2009, <i>Watsonia coccinea</i> site. ( <i>Disa rufescens</i> )
Polystachya ottoniana	Epiphyte. In leaf at Grootvadersbosch lunch site 2009.
Pterygodium acutifolium	Sepals lime-green, petals yellow. Day 13, 2010.
Pterygodium alatum	Lip appendage with two broad lobes spanning flower. Locally numerous at Ceres, also south of Middleberg Pass.
Pterygodium caffrum	1 at Caledon 2017.
Pterygodium catholicum	Rather widespread. Napier, Ceres, Caledon, Tulbagh, Cederberg, etc.
Pterygodium hallii	Flowers 'upside-down'. c.5 at Nieuwoudtville wild flower reserve.
Pterygodium pentherianum	Lip appendage with two broad lobes spanning flower. Ceres.
Pterygodium schelpei	Flowers white. A few at Nieuwoudtville wild flower reserve.
Pterygodium volucris	Worcester botanic garden.
Satyrium bicallosum	Dull white flowers marked purple. Several at Houwhoek, new in 2019.
Satyrium bicorne	Flowers dull yellow tinged purplish brown. Leaves 2, flat on ground. Cederberg and Ceres.
Satyrium bracteatum	Short with yellow flowers marked dark reddish brown. Kirstenbosch (PGC).
Satyrium candidum	Flowers white, faintly tinged pink. Ceres 2018.
Satyrium carneum	Robust plant. Flowers pink. Several in flower Betty's Bay roadsides.
	resease plane i lo velo plane se vela in novel beny s buy roudshubs.

Satyrium coriifolium	Flowers orange. Very many in fine flower at Ceres, also at Houwhoek.
Satyrium erectum	Flowers pink. Numerous on one roadside at Nieuwoudtville. Also at Ceres.
Satyrium humile	Sweet scented flowers, basal leaves thin. Ceres.
Satyrium odorum	Flowers green tinged dull purple brown. Pungent flowers, fleshy leaves.
	Usually locally common, Kirstenbosch, Cape Point, West Coast NP, and
	Rooisand coast. Only West Coast NP and Rooisand coast this year.
Satyrium pumilum	Acaulescent. A few of this distinctive species at one site, Nieuwoudtville.
	Also locally common at Ceres this year.

## Poaceae

Added to my library in 2017 was the exhaustive 'Identification Guide to Southern African Grasses' by Fish et al, Sanbi 2015 (Strelitzia 36). Hopefully future tours will allow more time to put into this vast family!

Agrostis bergiana	
Aira cupaniana	Alien.
Aristida congesta	
Aristida diffusa	Houwhoek.
Aristida junciformis	
Arundo donax	Giant Reed. Alien.
Avena barbata	Alien.
Avena fatua	Wild Oat. Alien. Observatory etc.
Avena sativa	Oats. Alien.
Avena sterilis	Winter Wild Oat. Alien.
Brachypodium distachyon	Alien.
Briza maxima	Great Quaking Grass. Alien. Observatory etc.
Briza minor	Lesser Quaking Grass. Alien. Observatory etc.
Bromus diandrus	Great Brome. Alien.
Bromus madritensis	Compact Brome. Alien. Surely seen, but considered rare in SAG, only recorded Somerset West!
Bromus pectinatus	Alien.
Bromus rigidus	Stiff Brome. Alien.
Bromus sterilis	Barren Brome. Alien. Not in SAG.
Cenchrus ciliaris	
Cenchrus incertus	Alien.
Chaetobromus involucratus	
Cortaderia selloana	Alien.
Cymbopogon pospischilii	
Cynodon dactylon	Bermuda Grass.
Cynosurus echinatus	Rough Dogstail. Alien.
Ehrharta barbinodis	
Ehrharta calycina	Observatory etc.
Ehrharta erecta	•
Ehrharta longiflora	
Ehrharta thunbergii	
Ehrharta villosa	In dunes.
Ehrharta spp.	Others unidentified, but several more certainly present.
Eragrostis capensis	51
Eragrostis curvula	
Eragrostis racemosa	
<i>Eragrostis</i> spp.	A few others possibly seen.
Festuca scabra	······································
Fingerhuthia africana	Nieuwoudtville etc.
Hordeum murinum	Wall Barley. Alien.
Hyparrhenia hirta	Thatch Grass. Often abundant on roadsides.
Lagurus ovatus	Hare's-tail. Alien. Observatory etc.
Lolium multiflorum	Italian Ryegrass. Alien. Observatory etc.
Lolium perenne	Perennial Ryegrass. Alien. Observatory etc.
Lolium rigidum	Stiff Darnel. Alien.
Lolium temulentum	Darnel. Alien.
Lophochloa cristata	Alien.
Melinus repens	Alien.
mennus repens	

Panicum maximum Alien. Roadsides, Vanrhynsdorp to Van Rhyn's Pass. Pennisetum setaceum Others probably present. Pennisetum spp. Houwhoek. Pentameris macrocalycina Several others certainly present. A large genus. Some sixty other species Pentameris spp. occur in the area. Pentaschistus airoides Pentaschistus curvirostris Phalaris aquatica Bulbous Canary-grass. Alien. Phalaris minor Lesser Canary-grass. Alien. Phragmites australis Common Reed. Poa annua Annual Meadow-grass. Alien. Poa bulbosa Bulbous Meadow-grass. Smooth Meadow-grass. Alien. Poa pratensis Polypogon monspeliensis Alien. Pseudopentameris brachyphylla Hermanus and Betty's Bay. Pseudopentameris macrantha Schismus barbatus Surely present. Other Schismus species possibly seen too. Secale cereale Rye. Setaria megaphylla Others probably present. Setaria spp. Sporobolus africanus Sporobolus virginicus Stipa capensis Stipagrostis spp. Tenaxia stricta Robust tussocks in Hantam Botanic Garden. (Merxmuellera stricta). Themeda triandra Thinopyrum distichum Tribolium uniolae Widespread. Tribolium spp. Others certainly present. Squirreltail Fescue. Alien. Vulpia bromoides *Vulpia* spp. Others probably present. Potamogetonaceae Zannichellia palustris Horned Pondweed. Nieuwoudtville and Day 10, 2010. Restionaceae Reference: 'Restios of the Fynbos' by Els Dorrat-Haaksma and H.Peter Linder, 2<sup>nd</sup> edition, Struick 2012. More species of restio were present than are listed here, but with each visit more and more are being identified. Askidiosperma paniculatum Near Napier. Cannomois virgata Fernkloof. De Hoop. Ceratocaryum argenteum Elegia capensis Kirstenbosch, Harold Porter Botanic Garden fynbos and Michell's Pass. Elegia cuspidata Cape Point. Elegia ebracteata Fernkloof. Elegia filacea Cape Point and Fernkloof. Elegia fistulosa Fernkloof. Elegia juncea Fernkloof. West of Clanwilliam. Elegia macrocarpa Elegia microcarpa De Hoop. Elegia mucronata Cape Peninsula. *Elegia persistens* Harold Porter botanic garden fynbos and Fernkloof. Elegia spathacea Fernkloof. Elegia stipularis Cape Point, locally very common. Elegia tectorum Rooisand and Betty's Bay. Fernkloof and Houwhoek. Hypodiscus argenteus *Hypodiscus aristatus* Cape Point and Fernkloof. *Ischyrolepis eleocharis* De Hoop dunes and limestone slopes. Mastersiella digitata Cape Point. Nevillea obtusissima Houwhoek.

Restio bifarius	Harold Porter botanic garden fynbos and Fernkloof.
Restio capensis	Scattered records.
Restio cincinnatus	Locally dominant at Cape Point.
Restio egregius	Fernkloof.
Restio leptoclados	De Hoop.
Restio paniculatus	
Restio perplexus	Fernkloof.
Restio spp.	
Rhodocoma capensis	Greyton 2019 (PGC).
Soroveta ambigua	
Staberoha banksii	Cape Point.
Staberoha cernua	Fernkloof.
Staberoha distachyos	
Staberoha vaginata	
<i>Staberoha</i> sp.	
Thamnochortus erectus	De Hoop.
Thamnochortus fruticosus	Fernkloof.
Thamnochortus insignis	Dunes at De Hoop.
Thamnochortus lucens	Fernkloof.
Thamnochortus paniculatus	De Hoop.
Thamnochortus pulcher	Fernkloof.
Thamnochortus spicigerus	Harold Porter botanic garden fynbos 2018.
Thamnochortus sp.	Cape Point.
Willdenowia incurvata	West Coast NP. Babiana ringens site.
Willdenowia teres	Fernkloof.
Tecophilaeaceae	
Cyanella has flowers on slender pedicels,	a small bracteole near middle. Stamens in two groups with the upper anthers
smaller, style directed to one side.	
Cyanella alba	Flowers solitary on wiry pedicels, white, outer tepals flushed maroon on
	reverse. Nieuwoudtville, locally common.
Cyanella hyacinthoides	Raceme much branched. Flowers blue to mauve to white. Verloren Vlei.
Cyanella lutea	Flowers in elongate racemes, yellow with brown veins. Nieuwoudtville,
	Hantam and wild flower reserve, Worcester botanic garden, etc.
Cyanella orchidiformis	Flowers in elongate racemes, mauve with purple centre. West Coast
	National Park.
Thurniaceae (Prioniaceae)	
Prionium serratum	Palmiet. Oliphants River at Clanwilliam and Kogelberg.
Typhaceae	
Typha capensis	Bulrush. Cape Flats.
Zosteraceae	
Zostera capensis	Day 5, 2010.
	<i>Duj 0, 2010</i> .

# Eudicotyledons

Acanthaceae Justicia cuneata

Twiggy shrublet with pink marked cream flowers. Bloukrans Pass 2014.

Aizoaceae

Many more species of this large and complex family were seen than are listed here. Even identifying many to generic level is the province of an expert on the family. Over 1,000 species occur in the Karoo, the most speciose radiation of any plant family anywhere in the world.

Acrosanthes teretifolia

Aethephyllum pinnatifidum Aizoon paniculatum Aizoon rigidum Aizoon sarmentosum Argyroderma delaeti

Aridaria noctiflora Aridaria ?sp. Brownanthus sp. Carpanthea pomeridiana Carpobrotus acinaciformis Carpobrotus edulis Cheiridopsis cigarettifera *Cleretum papulosum* Conicosia elongata *Conicosia pugioniformis* Conophytum ficiforme Conophytum swanepoelianum ssp.rubrolineatum Conophytum sp. Delosperma litorale Dorotheanthus bellidiformis

Dorotheanthus maughanii

Drosanthemum framesii Drosanthemum hispidum

Drosanthemum latifolium Drosanthemum speciosum

Drosanthemum thudichumii Erepsia anceps Eurystigma clavatum Galenia africana

Galenia fruticosa Galenia sarcophylla Galenia sp. Jordaaniella dubia Lampranthus amabilis Lampranthus aurantium Lampranthus aureus Lampranthus haworthii Lampranthus uniflorus Lampranthus watermeyeri Leipoldtia schultzei Malephora crassa Malephora purpureocrocea Mesembryanthemum caudatum Mesembryanthemum guerichianum Mesembryanthemum nodiflorum Mesembryanthemum rapaceum Oscularia deltoides Phyllobolus nitidus

Decumbent with opposite glabrous leaves. Solitary white flowers with five perianth segments. Rooisand. Prostrate annual with small yellow flowers. Rooisand 2011. Sprawling, with small magenta flowers. Waylands. Grey hairy prostrate sub-shrub. Yellow sessile flowers. De Hoop. White flowers, Rooisand 2012. 'Silver skin'. Deciduous leaves, variable flower colour. Many in leaf in Knervslakte. Shrub with white flowers. Tanqua Karoo and Bloukrans Pass 2017. Quiver Tree Forest. Tanqua Karoo 2014. Yellow flowers. Waylands and Tienie Versveld. Rose-purple flowers. Filaments purple. De Mond 2018 (PGC). Hottentot Fig. Cape Point, West Coast NP, etc., locally common. Yellow flowers. Small yellow flowers. Nieuwoudtville 2018. Prostrate perennial with white or yellow flowers. Nieuwoudtville. Tufted perennial with yellow flowers. Babiana ringens site. 'Fig-shaped' leaf bodies. Wild in Worcester BG. Tiny plants at Nieuwoudtville waterfall. Houwhoek 2018. Agulhas coast 2018 (PGC). Livingstone Daisy. Tufted annual, flower colour variable. Cape Point, Waylands, Tienie Versveld, West Coast NP, etc. White flowers, with fleshy protruberances alternating with the stigmas. A few in fine flower at Bloukrans Pass, 2017. Creamy-white flowers. Tanqua Karoo, common. 2017. Shrublet with hispid branches and solitary magenta flowers. Nieuwoudtville, De Hoop, etc. Nieuwoudtville 2010. Shrublet with striking red to orange flowers. Wild at Worcester botanic garden. Flowers white, orage, or yellow. Worcester botanic garden. Probably this at Greyton 2019 (PGC). Karoo 2011. Yellow-green shrublet with inconspicuous flowers. Nieuwoudtville (numerous), Knervslakte, etc. Grey felted shrublet with small red or yellow flowers. Karoo 2011. Nieuwoudtville. West Coast National Park. West Coast National Park. De Hoop. Included in L.pauciflorus in PGCFR. Striking red flowers. This at Waylands 2014? Orange flowers. West Coast National Park lunch site. Wild in Worcester botanic garden. Shrublet with pinkish purple flowers. Tanqua Karoo 2014. North of Nieuwoudtville, 2019. Shrublet with purple flowers. Nieuwoudtville waterfall. Golden yellow flowers. Tanqua Karoo 2017. Quiver Tree Forest. Nieuwoudtville 2018. Knervslakte etc. Annual with white flowers. Tanqua Karoo 2012. Knervslakte. Reddish branches, grey leaves, pink flowers. Greyton 2019 (PGC). **Ouiver Tree Forest?** 

Tanqua Karoo 2012. Phyllobolus splendens Phyllobolus tenuiflorus Hantam 2011? Prenia pallens Prenia vanrensburgii Nieuwoudtville. Ruschia caroli Ruschia cedarbergensis Pakhuis Pass. Ruschia centrocapsula Ruschia cradockensis Ruschia extensa not in range. Ruschia indecora Ruschia langebaanensis Ruschia macowanii Hermanus coast (PGC). Ruschia sarmentosa Ruschia spinosa Ruschia unca Day 6 2010. West Coast NP. Tetragonia chenopodioides Tetragonia decumbens Boulders. Tetragonia fruticosa NP. etc. Tetragonia herbacea Pakhuis Pass 2017. Tetragonia hirsuta Tetragonia nigrescens Tetragonia portulacoides Tetragonia rosea Amaranthaceae (includes Chenopodiaceae) Atriplex bolusii Atriplex lindleyi Atriplex semibaccata West Coast National Park. Chenolea diffusa Chenopodium album Chenopodium murale Exomis microphylla Manochlamys albicans Wild in Worcester BG. Salsola aphylla Quiver Tree Forest. Salsola arborea Tanqua Karoo 2017. Salsola kali Sarcocornia natalensis West Coast NP. Near De Hoop. Sarcocornia sp. Suaeda fruticosa Berg River at Velddrif. Anacampserotaceae Anacampseros retusa Anacardiaceae Heeria argentea Laurophyllus capensis Grootvadersbosch 2009.

Quiver Tree Forest, not in flower. Ovate leaves, white flowers. Cape Agulhas 2018 (PGC). Tanqua Karoo, 2017. This name is not in PGCFR. Purple flowers. Tanqua Karoo 2014. Pink flowers. Nieuwoudtville 2017. This species identified from the NWV wild flower guide, but PGCFR gives this as a poorly known species Shrublet with silvery white flowers. Babiana ringens site. Magenta flowers. West Coast National Park. Flowers reddish with a dark stripe. Cape Point coast. Magenta flowers. Quiver Tree Forest. Shrub, leaf margins recurving. Near Mamre, Tienie Versveld, West Coast Coarsely hairy. Pakhuis Pass. Perennial with yellow flowers. Near Mamre. Nieuwoudtville, Hantam and Papkuilsfontein. Magenta flowers. Pakhuis Pass.

West Coast NP coast. (A.cinerea) Grey-mealy annual weed. Australian. Knervslakte, etc. Mat-forming succulent perennial. West Coast NP. (Bassia diffusa). Worcester Botanic Garden. Nettle-leaved Goosefoot. Alien. Slightly mealy, diamond-shaped leaves. Grey-mealy shrub. Tanqua Karoo 2017. Prickly Saltwort. Alien. Annual with spine-tipped leaves. Roadside between De Hoop and Bredasdorp 2018.

Tiny succulent. Papkuilsfontein.

Small evergreen tree with cream flowers in panicles. Michell's Pass. Densely leafy evergreen shrub. Dioecious, panicles of yellowish flowers.

Searsia (formerly Rhus) are shrubs or small	trees with trifoliate leaves.
Searsia angustifolia	Leaflets lanceolate. Michell's Pass. Bain's Kloof Pass. 2017.
Searsia burchelli	Quiver Tree Forest.
Searsia chirindensis	Grootvadersbosch 2009.
Searsia crenata	Leaflets sessile, apex blunt and crenate. De Hoop dunes.
Searsia cuneifolia	Leaves trifoliolate, obovate leaflets coarsely toothed above. Rooisand.
Searsia dissecta	Margins of leaflets sharply toothed. Waylands, Worcester BG.
Searsia glauca	Bluish leaves. Cape Town Observatory, West Coast NP, De Hoop, etc.
Searsia incisa	Leaflet margins lobed or dentate. Nieuwoudtville.

Searsia laevigata

Searsia lancea Searsia longispina Searsia lucida Searsia pallens Searsia pterota Searsia rehmanniana Searsia rosmarinifolia Searsia scytophylla Searsia tomentosa Searsia undulata

Apiaceae Annesorhiza altiscapa Annesorhiza macrocarpa Arctopus dregei Arctopus echinatus

Capnophyllum africanum Centella macrocarpa Centella triloba Ciclospermum leptophyllum Dasispermum hispidum Dasispermum suffruticosum Foeniculum vulgare Hermas villosa Lichtensteinia lacera Notobubon galbanum Stoibrax capense Torilis arvensis

Apocynaceae (includes Asclepiadaceae) Aspidoglossum heterophyllum

Carissa bispinosa Cynanchum africanum Cynanchum obtusifolium

Eustegia minuta

*Gomphocarpus cancellatus Gomphocarpus fruticosus* 

Hoodia gordonii Microloma sagittatum

Microloma tenuifolium

Quaqua mammillaris Sarcostemma viminale Stapelia erectiflora/Stapelia glanduliflora Stapelia hirsuta

Aquifoliaceae Ilex mitis

Araliaceae Cussonia thyrsiflora Leaflets sessile, obovate. Kirstenbosch, near Mamre, West Coast NP, De Hoop. Worcester Botanic Garden. Armed shrub. This species West Coast NP? Leaves shiny. Cape Town Observatory, Cape Point, De Hoop etc. Oblanceolate sessile leaflets. Sessile obovate leaflets with revolute margins. Sessile obovate leaflets, slightly hairy. Leaflets linear. Stiff sessile obovate leaflets, margins revolute. Leaflets white woolly below. Kirstenbosch, Waylands. Leaflets sticky and aromatic. Nieuwoudtville and Pakhuis Pass.

Tall slender umbellifer. Lemon scented. Nieuwoudtville. De Hoop dunes 2013. Possibly this species at Tulbagh. Bristly leaves appressed to the ground, with central flowers/fruits surrounded by very spiny bracts. Darling area, West Coast NP, Nieuwoudtville, Caledon, etc. Widespread. West Coast. Shrublet, leaves linear. Probably this at Kogelberg 2019. Fernkloof and Kogelberg. Alien. Seen on the Peninsula, 2018. West Coast National Park, 2019. (Sonderina hispida). In leaf at Babiana ringens site. Fennel. Alien. Roadsides near De Hoop 2018. Robust, leaves white felted below. In leaf at Fernkloof. In leaf, Kirstenbosch and Houwhoek. This species in leaf, Kirstenbosch. (Peucedanum galbanum) Annual with 3-pinnatisect leaves. West Coast NP dunes. Spreading Hedge-Parsley. Alien. Scattered records, e.g. Observatory.

Branched perennial to 20cm, flowers green with white corona. Cape Point burn site, 2014. Houwhoek 2019. Num-num. Thorny shrub with milky sap. De Hoop. Brown twisted petals and a white corona. West Coast NP. Climber with dull green flowers and a white corona. Kirstenbosch and Boulders. Green flowers in small umbels. Near Mamre, Nieuwoudtville, 2011. Rooisand 2012. Hairy shrub with cream flowers. Ceres roadsides. West Coast NP in fruit. Shrub with nodding clusters of cream flowers. Fruits swollen with fleshy projections. Lower Breede Valley. Not seen 2019. Tanqua Karoo. Not found since 2011. Climber with tubular pink to red flowers. Pointed petals. Pollinated by sunbird tongues. Babiana ringens site, West Coast NP, Nieuwoudtville, Ceres, etc. Climber with tubular orange to red flowers. Rounded petals. Pollinated by sunbirds tongue. Ceres, Worcester, Napier, Rooisand, etc. Knervslakte 2013. Near De Hoop. One of these species at Papkuilsfontein, 2014. In fruit. Worcester burn site 2013. Greyton 2018 and 2019 (PGC).

Tree with glossy leaves. Kirstenbosch.

*rsiflora* Sprawling shrub or tree, digitate leaves. Cape Peninsula 2010.

Asteraceae

This is a vast family in the region and although we identified many species, more species than are listed here were present but unidentified.

Amellus microglossus	Hairy annual with small yellow flowers with reduced white rays. Tanqua Karoo and Quiver Tree Forest 2014.
Amellus tridactylus	Annualwith mauve rays. Botterkloof Pass 2019.
Anaxeton asperum	Fernkloof.
Anaxeton laeve	Woolly shrublet, small discoid flowers in dense rounded clusters. Cape
	Peninsula.
Arctotheca have several rows of bracts with	th broad membranous margins and tips.
Arctotheca calendula	Cape Weed. Disc black. Widespread and often abundant.
Arctotheca populifolia	Mat forming white felted perennial. Coastal dunes, Langebaan, West Coast NP, and De Hoop.
Arctotis have 5 or 6 rows of bracts, outer of	often tailed, inner broad with large membranous tips.
Arctotis acaulis	Outer bracts have slender woolly tips. Nieuwoudtville, Hantam and wild
	flower reserve, Darling, De Hoop, West Coast National Park.
Arctotis aspera	Harsh soft-wooded shrublet, yellow disc, white ray petals reddish below.
	Cape Point coast stop. Not in flower 2018 or 2019.
Arctotis breviscapa	Flowers blackish with orange or yellow rays red on reverse. Outer bracts
	with slender woolly tips. West Coast NP.
Arctotis fastuosa	Flowers orange with a dark ring. Near Quiver Tree Forest.
Arctotis hirsuta	Slightly fleshy thinly hairy leaves. West Coast NP.
Arctotis incisa	Rays orange or white reddish on reverse. Cape Agulhas coast 2018 (PGC).
Arctotis revoluta	Leaves bipinnatisect, flowers yellow or orange. Nieuwoudtville waterfall Pakhuis Pass, and Seeberg.
Arctotis scabra	Leaves roughly hairy. Fernkloof. (A.semipapposa)
Arctotis stoechadifolia	Silvery woolly perennial, flowers cream with reddish reverse, outer bracts with woolly tails. West Coast NP.
Arctotis spp.	Others certainly present.
Athanasia trifurcata	Shrub with leaves toothed above. Middleberg Pass, Ceres, j and Tulbagh.
Athrixia heterophylla	Cobwebby shrublet with pink flowers. Houwhoek.
Berkheya are thistle-like usually with yello	ow flowers.
Berkheya armata	Tulbagh, near Napier, Caledon, and De Hoop.
Berkheya barbata	Houwhoek.
Berkheya coriacea	De Hoop dunes and limestone slopes.
Berkheya fruticosa	Nieuwoudtville.
Berkheya glabrata	Nieuwoudtville, Hantam dolerite, a few in flower.
Berkheya heterophylla	Nieuwoudtville roadsides.
Berkheya rigida	Langebaan. Ceres. 2018.
Berkheya spinosa	Thorny shrub to 45cm. Pale yellow flowers. Bloukrans Pass 2014.
<i>Berkheya</i> sp.	Grey spiny, locally very common, Papkuilsfontein.
Bidens pilosa	

Capelio tabularis	In leaf Cape Point coast lunch site. (Alciope tabularis).
Chrysocoma ciliata	Shrublet with discoid yellow heads. Nieuwoudtville, Ceres, Napier.
Chrysocoma coma-aurea	Scattered records.
Chrysocoma hantamensis	Hantam, Nieuwoudtville.
Cichorium intybus	Chicory. Alien. Roadsides, 2014.
Cineraria lobata	This species south of Gordon's Bay? 2014.
Cineraria geifolia	West Coast National Park and Kirstenbosch.
Cineraria platycarpa	Discoid white flowered form at Worcester Botanic Garden.
Conyza albida	West Coast NP 2010.
Conyza canadensis	Canadian Fleabane. Alien.
Corymbium africanum	Linear leaves, purple flowers. Houwhoek and Kogelberg.
Corymbium sp.	Kogelberg 2019. Corymbium cymosum?

<i>Cotula</i> have discoid heads, although someti	mes with rays, 2 rows of bracts with narrow membranous margins.	
Cotula barbata	Softly hairy annual. Nieuwoudtville.	
Cotula bipinnata	Nieuwoudtville.	
Cotula coronopifolia	Wet areas at Tienie Versveld, Ceres, Rooisand.	
Cotula duckittiae	Large orange flowers, this rather common West Coast NP.	
Cotula eckloniana	Florets broadly winged. West Coast NP 2010.	
Cotula filifolia	Linear leaves. Cape Agulhas 2018 (PGC).	
Cotula microglossa	Leaves tripinnatisect. Bracts 1-nerved. Nieuwoudtville wild flower	
Coluia microgiossa	reserve.	
Cotula nudicaulis	Bracts large and round. Nieuwoudtville, locally very common.	
Cotula turbinata	Flower heads shortly radiate. Native weed, widespread and common.	
	Others surely present.	
Cotula spp.	Others surery present.	
Cullumia are spiny shrublets, with four row	s of stiff spiny bracts. Yellow flowers	
Cullumia carlinoides	De Hoop limestone.	
Cullumia setosa	Leaves oval. Cape Point.	
Cullumia squarrosa	Leaves needle-like. Cape Point.	
Callanda squarrosa	Leaves needle-like. Cape I olint.	
Didelta have vellow flowers with two rows	of bracts, the inner lance-shaped, the outer large and leaf-like.	
Didelta carnosa	Thinly or densely cobwebby shrublet. West Coast NP coast stop, locally	
	very common.	
Didelta spinosa	Sometimes prickly, leaves cordate. Nieuwoudtville, Cederberg,	
Duciu spinosu	Knervslakte.	
Dimorphotheca have large radiate flowers,	1 or 2 rows of narrow bracts.	
Dimorphotheca cuneata	Shrublet with yellow flowers, white or orange rays darker on reverse.	
-	South of Calvinia, 2014.	
Dimorphotheca fruticosa	Shrub, ray florest white or mauve. Cape Agulhas coast 2018 (PGC).	
Dimorphotheca nudicaulis	Perennial. Cape Point and Fernkloof.	
Dimorphotheca pluvialis	Annual. Widespread and abundant.	
	L	
Dymondia margaretae	Field full near De Hoop 2009. Stemless, low, with yellow flowers.	
Edmondia fasciculata	Bracts bright yellow. Houwhoek and Fernkloof.	
Edmondia pinifolia	An 'everlasting'. Houwhoek and Fernkloof 2018.	
Edmondia sesamoides	Yellow flowers. Fernkloof.	
Elytropappus rhinocerotis	Renosterbos. Dominant in, and giving its name to, renosterveld.	
Emilia hantamensis	Tall annual with radiate yellow flowers. Numerous on dolerite	
	at Nieuwoudtville wild flower reserve.	
Erigeron karvinskianus	Alien. Worcester Botanic Garden 2017.	
Eriocephalus are shrubs with heads of small		
Eriocephalus africanus	Wild Rosemary. Cape Peninsula, West Coast NP, etc.	
Eriocephalus capitellatus	Silvery silky shrub to 1.6m.	
Eriocephalus ericoides	Glabrescent shrub to 1m. Quiver Tree Forest and Knervslakte.	
Eriocephalus microphyllus	South of Calvinia 2017.	
Eriocephalus paniculatus	Bracts and ovaries densely golden woolly. De Hoop.	
Eriocephalus punctulatus	Nieuwoudtville.	
Eriocephalus purpureus	Nieuwoudtville and Cedarberg.	
Eriocephalus racemosus	Babiana ringens site, and West Coast NP.	
Eriocephalus spinescens	Tanqua Karoo 2017. (?, this name is not in PGCFR).	
	h one row of smooth oval bracts joined at the base.	
Euryops abrotanifolius	Cape Peninsula, Bain's Kloof Pass, 2017. Fernkloof 2019.	
Euryops annuus	Tanqua Karoo 2017.	
Euryops linearis	Leaves mostly entire and linear. De Hoop limestone, common.	
Euryops multifidus	Leaves mostly trifid with forked lateral lobes. West Coast NP.	
Euryops othonnoides	Grey-felted shrublet, leaves pinnatisect. Middleberg Pass.	
Euryops speciosissimus	Large shrub with very long pinnatisect leaves and large solitary flowers.	
	Locally dominant in the Cederberg, and Michell's Pass.	

Euryops tenuissimus	Leaves filiform, flowers solitary. Nieuwoudtville.
Euryops virgatus	Small pinnatisect leaves. Hantam first stop 2013. Local endemic.
Euryops virgineus	Obovate leaves, small solitary flowers. Naturalised at Kirstenbosch.
Euryops spp.	A few others unidentified.
Euryops spp.	A low others undentified.
<i>Felicia</i> have yellow or rarely blue disc flor membranous margins.	ets and blue, pink or white rays, with 2 to 4 rows of green bracts with narrow
Felicia aculeata	Bracts in 2 rows. Shrublet. De Hoop.
Felicia aethiopica	Bracts in 2 rows. Shrublet. Wild in Harold Porter BG and Kirstenbosch
Felicia amoena	Bracts in 2 rows. Annual or perennial. De Hoop dunes.
Felicia australis	Bracts in 3 rows. Widespread annual, e.g. Nieuwoudtville, covering large
	areas.
Felicia bergeriana	Bracts in 2 rows. Annual.
Felicia dregei	Woody shrublet. Bracts in 3 rows. Pakhuis Pass.
Felicia elongata	Bracts in 2 rows. Perennial. West Coast NP.
Felicia filifolia	Bracts in 3 rows. Shrub, needle-like leaves. Nieuwoudtville, Cape Peninsula, Worcester BG.
Felicia fruticosa	Bracts in 3 rows. Shrub, small oblanceolate leaves. South of Gordon's
r elicia fruncosa	
	Bay and Cape Point.
Felicia heterophylla	Bracts in 2 rows. Annual with blue discs. <i>Babiana ringens</i> site 2018.
Felicia hirsuta	Bracts in 3 rows. Shrublet. Karoo 2009.
Felicia hirta	Bracts in 3 rows. Shrublet. Nieuwoudtville.
Felicia merxmuelleri	Bracts in 2 rows. Annual. Cedarberg, Quiver Tree Forest and
	Nieuwoudtville.
Felicia muricata	Bracts in 3 rows. Shrublet. Bloukrans Pass 2014.
Felicia namaquana	Bracts in 2 rows. Annual. Karoo 2009.
Felicia tenella	Bracts in 3 rows. Annual. West Coast NP and De Hoop.
Felicia spp.	Others unidentified.
Foveolina tenella	Aromatic annual with solitary radiate flowers, yellow with white rays.
	West Coast NP, Seeberg bird hide site.
Galeomma oculus-gati	Locally common in Hantam Botanic Garden.
Galinsoga parviflora	Alien.
<i>Gazania</i> are perennials or annuals with mil cup.	ky latex. Several rows of stiff bracts joined below into a smooth or hairy
Gazania heterochaeta	Tanqua Karoo 2012.
Gazania krebsiana	Perennial. Flowers yellow or orange. West Coast NP.
Gazania lichtensteinii	Annual. Flowers yellow of orange. Quiver Tree Forest.
Gazania pectinata	Annual. Flowers yellow of orange with dark ring. West Coast NP and De
Guzania pecinaia	Hoop.
Caravia visida	•
Gazania rigida	Perennial. Flowers yellow or orange usually with a dark ring. Nieuwoudtville.
Commission and a	
Gazania serrata	Cederberg lunch site.
Gerbera linnaei	Perennial with tufted leaves, yellow-felted below. Franschhoek Pass 2017.
<i>Gerbera</i> sp.	In leaf at Rooisand 2013.
Gnapthalium capense	
Gnapthalium pauciflorum	Nieuwoudtville glacial pavement, this species 2013?
Gnapinatium paucijiorum	Neuwoudtvine gracial pavement, uns species 2013?
	s of stiff bracts joined below into a cup that becomes woody and encloses the
seeds.	
Gorteria diffusa	Beetle Daisy. Nieuwoudtville, superabundant in 2018. Only a few in 2019.
Gorteria personata	Darling area, West Coast NP, Nieuwoudtville etc.
Gymnodiscus capillaris	Small yellow flowered annual. Cape Point.
	vith disciform flowers with several rows of papery bracts.
Helichrysum dasyanthum	Grey woolly with yellow flowers. De Hoop dunes.
Helichrysum moeserianum	Grey woolly annual, bracts bright yellow. Botterkloof Pass.

Helichrysum pandurifolium

Helichrysum retortum Helichrysum revolutum

Helichrysum rosum Helichrysum teretifolium Helichrysum tinctum Grey-woolly shrublet, clusters of discoid flowerheads with creamcoloured bracts. Kirstenbosch. Large white flowers flushed pink, papery bracts. De Hoop dunes. Corymbs of straw-coloured flowers. Cape Point, West Coast NP, *Babiana ringens* site. Tanqua Karoo 2010. Corymbs of creamy white flowers. De Hoop. Nieuwoudtville, new in 2019.

*Hirpicium* have usually needle-like leaves with margins rolled under and felted beneath. Several rows of stiff bracts united below into a smooth or hairy cup. Flowers yellow or white.

Hirpicium alienatum	Twiggy shrublet. Bracts acuminate. North of Nieuwoudtville.
Hirpicium integrifolium	Shrublet. Bracts filiform. Robertson roadsides 2012.
Hymenolepis crithmoides	Shrub with finely divided leaves, with clusters of small flowers in flat-
	topped clusters. South of Gordon's Bay. (H.parviflora).
Hypochaeris glabra	Smooth Cat's-ear. Alien.
Hypochaeris radicata	Cat's-ear. Alien. Widespread.
Ifloga paronychioides	Waylands, 2019. This name is not in PGCFR.
Ifloga polycnemoides	Nieuwoudtville, new in 2019.
Ifloga thellungiana	White-membranous annual with straw-coloured discoid heads hidden
	among leaves. Ceres.
<i>Ifloga</i> sp.	West Coast NP lunch site, 2017.
Lactuca serriola	Prickly Lettuce. Alien.
Lasiopogon muscoides	Annual, woolly mats. Tanqua Karoo 2014.
Lasiospermum brachyglossum	Annual with globose flower-heads, yellow and red with reddish rays.
	Tanqua Karoo 2017.
Leysera gnaphalodes	Shrublet. Nieuwoudtville.
Leysera tenella	Annual or short-lived perennial. Greyton 2019 (PGC).
Lidbeckia quinqueloba	White rayed flowers, on rocks at Pakhuis Pass.
Macledium spinosum	Cushion forming shrublet, white and pink flowers, bracts spiny above.
	Greyton 2019 (PGC).
Metalasia are ericoid shrubs with involu-	ucral bracts in several rows. A confusing genus!
Metalasia brevifolia	This species Harold Porter fynbos? 2018.
Metalasia calcicola	De Hoop limestone.
Metalasia cephalotes	Cape Point.
Metalasia densa	Widespread, e.g. Pakhuis Pass.
Metalasia erubescens	Fernkloof.
Metalasia fastigiata	Cederberg.
Metalasia muricata	Locally common at De Hoop. Also Cape Peninsula.

Nidorella pinnata

Metalasia spp.

Perennial, pinnatifid leaves, corymbs of disciform yellow flowers. Greyton 2019 (PGC).

Oedera are shrubs with a few rows of rather translucent bracts.

Oedera capensis	Cape Point 2018. De Hoop limestone 2019.
Oedera genistifolia	Tulbagh, Ceres, and also Napier?
Oedera imbricata	Fernkloof.
Oedera squarrosa	Houwhoek, Cedarberg, Nieuwoudtville waterfall, Worcester, and Ceres.
Oncosiphon grandiflorum	Robust aromatic annual with yellow discoid heads. North of Clanwilliam.
Oncosiphon suffruticosum	Aromatic annual herb with with discoid yellow flowers. West Coast NP, superabundant. Scattered records elsewhere.
Osmitopsis asteriscoides	Erect shrub with white-rayed flowers. Marshes at Cape Point and Betty's Bay.

Others surely present.

Osteospermum have 2 to 4 rows of narrow bracts, and yellow flowers.		
Osteospermum acanthospermum	Annual with yellow flowers. Tanqua Karoo, 2017.	
Osteospermum clandestina	Near Mamre, Nieuwoudtville, Observatory, Ceres, etc.	
Osteospermum dentatum	Perennial, yellow flowers in branched corymbs. West Coast National	
-	Park, new in 2019.	

Osteospermum ilicifolium	Shrub with sharply toothed leaves and yellow flowers. Fernkloof.
Osteospermum incana	Scattered records. (Chrysanthemoides incana).
Osteospermum junceum	Single-stemmed shrub with yellow flowers. Greyton 2019 (PGC).
Osteospermum leptolobum	Yellow flowered unpleasant smelling shrub. Tanqua Karoo 2017.
Osteospermum monilifera	Widespread and very common. (Chrysanthemoides monilifera).
Osteospermum oppositifolium	Rounded glaucous shrub. North of Nieuwoudtville, new in 2019.
Osteospermum pinnatum	Annual with white to orange rays dark at base. Botterkloof Pass.
Osteospermum polygaloides	Shrublet, leaves leathery, solitary yellow flowers, bracts spiny backed.
1 1 70	Cape Point 2014.
Osteospermum sinuata	Quiver Tree Forest.
Osteospermum spinosum	This species at Houwhoek, 2018?
Osteospermum subulatum	Shrublet. South of Bredasdorp 2018 (PGC).
Osteospermum spp.	Others surely present.
Osieospermum spp.	Others surery present.
Othering has one row of smooth breats join	ad at the base
Othonna has one row of smooth bracts join	
Othonna arborescens	Succulent shrublet, leaves crowded at branch tips. West Coast NP. Cape
	Point.
Othonna arbuscula	Succulent shrub, reminiscent of a woody <i>Crassula</i> . Worcester Botanic
	Garden.
Othonna auriculifolia	Leaves radical, toothed to deeply lobed. Pakhuis Pass and Papkuilsfontein
	waterfall.
Othonna bulbosa	Tuberous perennial. Cape Point.
Othonna cacalioides	Dwarf succulent. Nieuwoudtville waterfall.
Othonna ciliata	Subshrub with yellow flowers. Wellington 2017.
Othonna coronopifolia	Shrub with solitary flowers on long peduncles. West Coast NP.
Othonna cylindrica	Shrub with flowers in corymbs. West Coast NP.
Othonna dentata	Succulent shrublet. Fernkloof cliffs.
Othonna digitata	Perennial with disciform purple flowers. Cape Point and West Coast NP.
Othonna erythrochaeta	Nieuwoudtville, in seed, 2011.
Othonna filicaulis	Perennial with disciform flowers. West Coast NP. ( <i>O.undulosa</i> ).
Othonna parviflora	Perennial with erect wand-like stems. Cederberg.
Othonna quercifolia	Succulent shrublet. Quiver Tree Forest, Knervslakte.
Othonna quinquedentata	Shrub with slender erect stems. Houwhoek area.
Othonna spp.	Others unidentified, including a purple rayless species at Cape Point.
Omonna spp.	Others undentified, including a purple rayless species at Cape Folia.
Pentzia incana	White weally shub with vallow dissaid hands. Nieuwoudtville
	White-woolly shrub with yellow discoid heads. Nieuwoudtville.
Petalacte coronata	Mauve discoid heads, bracts with white papery appendages. Cape Point.
Phaenocoma prolifera	An 'everlasting' with striking purple flowers and pink papery bracts.
	Fine at Houwhoek, also Cape Point and Fernkloof.
Picris echioides	Bristly Oxtongue. Alien.
Polyarrhena reflexa	Leaves reflexed, ray petals white, pink on reverse. Kirstenbosch and
	Fernkloof.
Printzia polifolia	White-woolly shrub with mauve rayed flowers. Caledon.
Pseudognapthalium luteoalbum	Rooisand 2011.
Pteronia are shrubs with tubular florets and	
Pteronia camphorata	West Coast NP.
Pteronia divaricata	Bloukrans Pass 2017.
Pteronia glabrata	Knervslakte.
Pteronia glauca	Nieuwoudtville.
Pteronia glomerata	Tanqua Karoo 2017.
Pteronia incana	Ceres, near De Hoop, Worcester BG, Nieuwoudtville waterfall, West
	Coast National Park.
Pteronia pallens	Bloukrans Pass 2017.
Pteronia paniculata	Worcester BG.
Pteronia viscosa	Quiver Tree Forest.
1 10101111 1100001	
Rhynchonsidium are annuals with many roy	vs of bracts, the inner larger and lanceolate, the outer shorter and ovate.
Rhynchopsidium pumilum	Nieuwoudtville, abundant.
Rhynchopsidium sessiliflorum	Flowers sessile. West Coast, Worcester BG, etc.

iilum	Nieuwoudtville, abundant.
iliflorum	Flowers sessile. West Coast, Worcester BG, etc.

*Senecio* usually has one row of bracts, often with membranous edges. Usually a few small dark-tipped bracts occur on the peduncle below the involucral bracts.

Senecio abruptus	Annual, yellow flowers. Numerous at Nieuwoudtville.
Senecio arenarius	Glandular hairy annual, rays mauve. Widespread, e.g. Cape Point,
	numerous in West Coast NP, Nieuwoudtville. (S. cakilefolius).
Senecio arnicifolius	Shrublet with yellow flowers. De Hoop.
Senecio burchellii	Woody shrublet with yellow flowers. Widespread and abundant.
Senecio cinerascens	White-woolly shrub with yellow flowers. Bloukrans Pass 2017.
Senecio elegans	Glandular hairy annual, leaves fleshy, coastal sands at De Hoop,
	Babiana hirsuta site, and Veldriff.
Senecio erosus	Perennial, yellow flowers. Nieuwoudtville, Bikoes.
Senecio hastatus	Sticky perennial with yellow flowers. De Hoop.
Senecio hastifolius	Perennial with purple ray florets. Kogelberg.
Senecio junceus	Apparently leafless, rod-like succulent stems. Probably this at
Serve et a funce aus	Worcester Botanic Garden 2019.
Senecio laevigatus	Annual, yellow flowers. Possibly this species De Mond 2018 (PGC).
Senecio littoreus	Annual, yellow flowers. West Coast NP, common, and Cape Point.
Senecio maritimus	Annual, yellow flowers. West Coast NP coast stop.
Senecio panduratus	Perennial. Nieuwoudtville, Papkuilsfontein waterfall and Hantam.
Senecio pubigerus	Rooisand, Caledon, 2017.
Senecio purpureus	Kirstenbosch, and Harold Porter BG. 2018.
Senecio rigidus	Rough Ragwort. Locally numerous Cape Point, Kogelberg, Kleinmond,
Senecto rigitais	and Rooisand.
Senecio sarcoides	West Coast NP.
Senecio surcolles Senecio spiraeifolius	Perennial with pinnatisect leaves. Nieuwoudtville 2014.
Senecio spiratijonas	Others unidentified.
senecio spp.	ould's undentified.
Sonchus asper	Prickly Sow-thistle. Alien. Scattered records.
Sonchus oleraceus	Smooth Sow-thistle. Alien. Scattered records.
Stoebe aethiopica	Harold Porter BG fynbos, Houwhoek.
Stoebe cinerea	Ericoid shrub. Ceres, Tulbagh, Houwhoek.
Stoebe plumosa	Rooisand.
Surger with a grant falted meron micle with a grant	avous dissocial flavours with several news of non-any broats
	cuous discoid flowers with several rows of papery bracts.
Syncarpha argyropsis	Flowers in loose terminal clusters. Bracts white. De Hoop.
Syncarpha canescens	Bracts pink to red. De Hoop.
Syncarpha chlorochrysum	Bracts pale yellow. De Hoop limestone.
Syncarpha gnaphaloides	Shrublet, yellow discoid flowers, reddish-brown bracts. In bud at
а I I I I I I I I I I I I I I I I I I I	Houwhoek.
Syncarpha paniculata	Bracts yellow or pink in bud, aging to white. De Hoop dunes.
Syncarpha speciocissima	Solitary flower heads. Bracts white. Cape Point in flower.
Syncarpha vestita	Flowers in loose terminal clusters. Bracts white. Cape Point, Fernkloof,
	and Kogelberg.
Tarchonanthus littoralis	Small tree. Flowers discoid in large panicles. Cape Peninsula.
	( <i>T.camphoratus</i> in part).
Ursinia has broad bracts in many rows, with	h conspicuous papery tips. Pappus of 5 white scales which enlarge in fruit.
Ursinia anthemoides	Annual, solitary flower heads yellow or orange, sometimes with dark ring.
	Observatory, Waylands, Ceres, etc. Locally very common.
Ursinia cakilifolia	Annual, solitary flowers yellow or orange. Cederberg lunch site.
	Nieuwoudtville, numerous.
Ursinia dentata	Shrublet. De Hoop.
Ursinia nana	Solitary yellow flowers. Tanqua Karoo 2017.
Ursinia nudicaulis	Shrublet, solitary yellow flowers. Kirstenbosch.
Ursinia paleacea	Shrub, yellow flowers dark on reverse. De Hoop.
Ursinia pilifera	Shrublet, solitary flowers with white or yellow rays dark on reverse.
	Nieuwoudtville.
Ursinia pinnata	Densely leafy shrub with pinnatisect leaves. Kogelberg, new in 2019.
Bignoniaceae	
Rhizogum obovatum	Karoo Gold. Very distinctive shrub with impressive yellow flowers.

Tecoma capensis	Worcester Botanic Garden, but native in the area. Cape Honeysuckle. Trumpet shaped orange flowers. Native somewhat further east but naturalised occasionally in our area, e.g. Boulders.
Boraginaceae	
Amsinckia retrorsa	Alien. The only species listed in Cape Plants but surely more than one species present. Only West Coast National Park this year.
Anchusa capensis	Typical alkanet with blue flowers. Nieuwoudtville roadsides 2018.
Codon royenii	Roughly hairy shrublet. Large cream flowers with purple stripes. Near Quiver Tree Forest, in flower.
Echium candicans	Alien. Near Houwhoek, roadsides.
Echium plantagineum	Purple Viper's Bugloss. Alien. Widespread and often abundant.
Lobostemon are small shrubs with usuall	y hairy leaves and funnel shaped blue to pink flowers.
Lobostemon argenteus	Spikes of blue flowers. Greyton 2019 (PGC).
Lobostemon curvifolius	Flowers pink, hairy outside. De Hoop flats and limestone.
Lobostemon echioides	Flowers small and rotate. Day 10, 2010.
Lobostemon fruticosus	Flowers blue to pink, hairy outside. Waylands, where common. West Coast NP. Tienie Versveld. Also Rooisand.
Lobostemon laevigatus	Reddish branches, leaves leathery with rough white margins. Cedarberg and Nieuwoudtville waterfall.
Lobostemon lucidus	Pink tubular flowers, blue at tips. Cape Agulhas, 2018 (PGC).
Lobostemon montanus	Leaves silvery hairy, blue flowers hairy outside. Cape Peninsula and Fernkloof.
Lobostemon trichotomus	Flowers blue, glabrous or hairy outside. South of Nieuwoudtville 2018.
Myosotis discolor	Changing Forget-me-not. Alien. Kirstenbosch, and Harold Porter BG lawns.
Trichodesma africanum	Quiver Tree Forest, 1 plant, 2009. Tanqua Karoo 2013 and 2014.
Brassicaceae	
Brassica napus	Rape. Alien.
Brassica nigra	Black Mustard. Alien.
Cadaba aphylla	Recorded 2010.
Capsella bursa-pastoris	Shepherd's Purse. Alien.
Cardamine hirsuta	Hairy Bittercress. Alien.
Coronopus didymus	Lesser Swinecress. Alien. Cape Town 2012.
Diplotaxis muralis	Annual Wall Rocket. Alien. Napier 2012.
Erophila verna	Spring Whitlow Grass. Kirstenbosch 2018.
Erucastrum austroafricanum	Locally common.
Species of this genus were a feature of the identification was often impossible. The	times slightly woody. Flowers blue, pink, white, or occasionally yellow. the tour in 2018 with a large number seen. Without a monograph of the genus, descriptions in PGCFR are not detailed enough to separate many species, and
there is no complete key. In 2019 many f	
Heliophila africana	Annual with blue flowers. Waylands etc.
Heliophila amplexicaulis	Annual, flowers white, pink or mauve. Nieuwoudtville.
Heliophila arenaria	Annual. Nieuwoudtville, Papkuilsfontein burn site 2014.
Heliophila carnosa	Shrublet, flowers white or pink. Ceres 2018.
Heliophila collina	Annual with white flowers. South of Nieuwoudtville.
Heliophila cornuta	Shrublet, white, blue, or mauve flowers. Fleshy filiform leaves. Worcester BG 2018.
Heliophila coronopifolia	Annual with blue flowers. Waylands.
Heliophila crithmifolia	Annual with pinnatifid leaves. Bloukrans Pass 2017.
Heliophila deserticola	Annual, mauvish white flowers. Tanqua Karoo 2013.

Annual with pink or blue flowers. West Coast NP? Willowy perennial with blue white-centred flowers. Nieuwoudtville waterfall 2018.

Shrub with showy purple flowers. Nieuwoudtville waterfall 2018. Perennial, leaves fleshy, flowers white to purple. De Hoop 2018. Shrub with white or pinkish flowers. De Hoop 2018.

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Heliophila digitata Heliophila elata

Heliophila juncea Heliophila linearis

Heliophila macra

Heliophila meyeri Annual with white flowers. Houwhoek. Heliophila pinnata Annual with blue to mauve flowers. Day 8, 2010. Heliophila pubescens Pubescent annual with whitish flowers. Bloukrans Pass 2017. Heliophila pusilla Annual with white flowers. De Mond 2018 (PGC). Heliophila refracta This species West Coast NP? Heliophila scoparia Shrublet with erect linear fruits, 30 to 120 mm. Heliophila subulata Annual with blue, mauve or pink flowers. Grootvadersbosch to De Hoop 2009. De Mond 2018 (PGC). Heliophila spp. Several other species were seen but not identified. Some 60 species occur. Lepidium africanum In fruit, Hantam botanic garden. Lepidium ruderale Narrow-leaved Pepperwort. Alien. Observatory. Lobularia maritima Sweet Alison. Alien. Matthiola incana Hoary Stock. Naturalised near Simonstown. Wild Radish. Alien. Widespread. Raphanus raphanistrum Bastard Cabbage. Alien, e.g. Nieuwoudtville. 2018. Rapistrum rugosum Sisymbrium capense Widespread. Eastern Rocket. Alien. Worcester Botanic Garden. Sisymbrium orientale

#### Bruniaceae

Shrubs, mostly ericoid. Leaves spirally arranged, needle-like, with a minute dry black tip. Flowers small, often cream or white. Sepals and petals 5. Near-endemic to Cape Fynbos.

Berzelia has dense globular capitula, and petiolate leaves.

Berzelia abrotanoides	Flower heads white, c.10mm diameter. Peduncles red, often swollen.
	Kirstenbosch, Cape Point, Houwhoek, and Rooisand.
Berzelia alopecuroides	Flower heads 3-4mm. Possibly this also seen at Fernkloof.
Berzelia lanuginosa	Flower heads c.5mm diameter, cream. Kirstenbosch, Cape Point,
0	Houwhoek, Rooisand.
Berzelia squarrosa	Flower heads white, less than 10 mm. Fernkloof.

Brunia has dense globular capitula and sessile leaves.

Brunia africana	Possibly this also seen at Fernkloof.
Brunia albiflora	Betty's Bay.
Brunia laevis	Houwhoek, new in 2019.
Brunia noduliflora	Houwhoek and Fernkloof.
Brunia paleacea	Fernkloof.
Brunia spp.	Others certainly present.
Staavia radiata	Cape Point coast stop and De Hoop.

Staavia radiata

Campanulaceae (Lobeliaceae included here, although treated separately in PGCFR)

Cyphia are erect or twining herbs with white to purple flowers, equally five lobed or two lipped, and split down the side.

Cyphia bulbosa	Erect, 2 anthers bearded. Kirstenbosch etc.
Cyphia crenata	Twining with white to mauve flowers. All anthers bearded. Leaves linear
	lanceolate to ovate. Babiana ringens site, West Coast NP, Waylands.
Cyphia digitata	Twining. All or 2 anthers bearded. Leaves digitate. Tienie Versveld,
	Nieuwoudtville, Ceres, Caledon, Houwhoek.
Cyphia eckloniana	Twining. Flowers cream inside, dull reddish outside. Bain's Kloof Pass
	2017.
Cyphia incisa	Erect. All anthers bearded. Tienie Versveld, Nieuwoudtville, Tulbagh.
Cyphia subtubulata	Twining. Corolla more or less equally five lobed. All anthers bearded.
	Tulbagh.
Cyphia volubilis	Twining with showy white to purple flowers. Fernkloof and Kogelberg.
Cyphia zeyheriana	Twining. Corolla more or less equally five lobed. Anthers glabrous.
	Ceres 2018.
Possibly seen too were:-	

Cyphia angustiloba Cyphia dentariifolia *Cyphia dentata Cyphia latipetala* Cyphia longipetala *Cyphia phyteuma* Cyphia polydactyla Cyphia ptilostemon

Lobelia comosa

Lobelia linearis

Lobelia pinifolia

Lobelia pubescens Lobelia setacea

Lobelia tomentosa

Microcodon glomeratus

Lobelia valida Lobelia spp.

Monopsis debilis

Lobelia coronopifolia Lobelia erinus

*Lobelia* has the corolla two-lipped and split to the base at the back, the front lip with three lobes. Annual, bright blue flowers. Rooisand 2018. Tufted shrublet, to 30cm, with large flowers. De Hoop. Annual or perennial. Flowers variable in colour. Rooisand 2018. Broom-like shrublet. De Hoop and Houwhoek. Erect shrublet, to 50cm. Scattered records. Locally common at Cape Point, Houwhoek, and Kogelberg. Pubescent leaves, white flowers. In shade at Fernkloof. Perennial. De Hoop. Shrublet. Scattered records, e.g. De Hoop limestone, Houwhoek. Shrublet with impressive deep blue flowers. De Hoop burn site. A few others were not identified.

> Annual with campanulate pale blue flowers. West Coast NP, 2017. Possibly this species at Cape Point 2011?

#### Wahlenbergia has campanulate flowers with broad petals.

Wahlenbergia androsacea Wahlenbergia annularis Wahlenbergia calcarea Wahlenbergia capensis Wahlenbergia nodosa Wahlenbergia paniculata

Wahlenbergia prostrata Wahlenbergia sp.

Caryophyllaceae Cerastium capense Cerastium glomeratum Cerastium semidecandrum Dianthus albens Dianthus sp. Herniaria capensis Kohlrauschia prolifera Polycarpon tetraphyllum Sagina procumbens Scleranthus annuus Silene burchellii Silene crassifolia Silene gallica Silene undulata Spergula arvensis Spergularia media Spergularia rubra Stellaria media

Celastraceae

Cassine peragua Cassine schinoides Gymnosporia buxifolia Maurocenia frangula Maytenus acuminata Maytenus oleioides

Tufted annual. Flowers white to pale blue. Quiver Tree Forest 2013. Attractive with flowers 15 to 20 mm across. Elands Bay 2014. Flowers white with darker reverse. De Hoop limestone, locally common. Attractive flowers, blue with a darker centre. Houwhoek. Wild in Worcester Botanic Garden. (Lightfootia nodosa) Flowers in lax corymbose cymes. 6-8mm diameter. North of Veldriff. 2014. Common on Bloukrans Pass roadsides, 2014. A shrub with very small recurved leaves. Robertson roadside 2012.

Glandular-hairy annual. Cape Point and De Hoop etc. Sticky Mouse-ear. Alien. Scattered records. Little Mouse-ear. Alien. De Hoop 2012. White flowers. De Hoop 2013. In leaf at Nieuwoudtville, Hantam dolerite, 2013. Ceres. Alien. Scattered records, e.g. De Hoop. Four-leaved Allseed. Alien. Cape Town etc. Procumbent Pearlwort. Alien. Annual Knawel. Alien. Flowers white to purple, petals bifid. Nieuwoudtville. (S.pilosellifolia). White to yellow flowers, bifid petals. Sands north of Veldriff. Alien. Observatory, Kogelberg, etc. A locally common weed. Wild Tobacco. West Coast National Park. (S. bellidioides). Corn Spurrey. Alien. Recorded 2010. Greater Sand-spurrey. Alien. Sand-spurrey. Alien. Recorded 2010. Common Chickweed. Alien.

Leaves opposite, conspicuous venation beneath. Kirstenbosch. De Hoop. Leaf venation inconspicuous underneath. Kirstenbosch. Spiny shrub with cymes of foetid white flowers. Kirstenbosch. Leaves leathery, margins revolute. West Coast NP. When leaf is torn elastic threads connect the segments. Kirstenbosch. Kirstenbosch and Nieuwoudtville waterfall.

Maytenus procumbens	De Hoop dunes.
Pterocelastrus tricuspidatus	In fruit, which are conspicuous and orange-yellow, West Coast NP, <i>Babiana ringens</i> site. Not noted 2019 but surely present.
Putterlickia pyracantha	Fruits striking. West Coast NP. Not noted 2019 but surely present.
Robsonodendron maritimum	De Hoop 2019.
Robsonouchur on mar timum	De 1100p 2013.
Convolvulariaceae	
Convolvulus capensis	Cape Bindweed. Ceres, Tulbagh, Botterkloof Pass, Cederberg.
Cuscuta sp.	
Ipomoea purpurea	Purple flowers. Alien. Naturalised at Boulders.
Crassulaceae	
'Cotyledon and Tylecodon' by Ernst	van Jaarsveld and Daryl Koutnik, Umdaus Press, 2004, was added to my libary
in 2017.	
Adromischus has sessile flowers in a	n unbranched spike.
Adromischus caryophyllaceus	Probably this at Houwhoek.
Adromischus filicaulis	Papkuilsfontein and Worcester Botanic Garden, in leaf.
Adromischus hemisphaericus	West Coast NP 2013.
Adromischus maculatus	Probably seen in leaf.
Adromischus triflorus	·
Adromischus spp.	In leaf at various sites, e.g. Middleberg Pass.
Cotyledon orbiculata	Large succulent leaves, clusters of nodding tubular red flowers, which are stalked. West Coast NP, Cape Peninsula. In fine flower Botterkloof Pass.
Crassula alpestris	Reddish, leaves triangular and opposite. Dense clusters of white flowers. A few at Nieuwoudtville waterfall.
Crassula atropurpurea	Red fleshy leaves. Nieuwoudtville.
Crassula barbata	Tanqua Karoo, very distinctive coiled hairy young plants. 2014.
Crassula campestris	Whitish star-shaped flowers. This at Papkuilsfontein, under rock? 2014.
Crassula capensis	Fernkloof 2018.
Crassula columnaris	Tubular white to yellow flowers in a terminal head. Botterkloof Pass.
Crassula ?comptonii	Nieuwoudtville waterfall rocks? 2014.
Crassula deltoidea	Perennial with clusters of cream-coloured urn-shaped flowers. Tanqua
	Karoo 2017.
Crassula dichotoma	Annual with wiry stems. Cape Point, Waylands, Bikoes, etc.
Crassula expansa filicaulis	Small white flowers tinged red. De Hoop. Worcester Botanic Garden.
Crassula fallax	Shrublet with tubular whitish flowers in flat topped clusters. Napier.
Crassula fascicularis	Clusters of tubular cream flowers. Cape Point, and Worcester botanic
erassina jaseremaris	garden.
Crassula muscosa	Scale like leaves, small yellowish flowers in upper axils. Verloren Vlei,
erassila museosa	West Coast National Park, etc.
Crassula natans	Red patches in wet depressions. Scattered records, e.g. Nieuwoudtville
Crassilla natano	(fine at Bikoes). Also seen in flower at West Coast NP.
Crassula nudicaulis	Reddish, leaves in basal rosette, Tiny white flowers in spike-like
Crassnia nuacanto	inflorescence. Cape Point, Nieuwoudtville, and De Hoop.
Crassula pellucida	Starry white flowers. Nieuwoudtville 2018.
стазыни ренисний	Starry white nowers, meawoud white 2010.

Crassula pellucida Crassula pubescens

Crassula pyramidalis

Crassula quadrangularis Crassula rupestris Crassula saxifraga

Crassula sebaeoides

Crassula subaphylla Crassula umbella Crassula umbellata Crassula vaillantii

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Botanic Garden.

North of Nieuwoudtville.

Shrublet. Verloren Vlei.

Ceres, 2009.

in 2019.

Pass.

Similar to C.nudicaulis but petals with round appendage at tip. Worcester

Tubular white flowers in terminal heads. Karoo ruined building stop before

Pairs of rounded leaves, nodding white to pink flowers. Pakhuis Pass, new

Annual with yellow flowers. Superficially resembles Sebaea. Van Rhyn's

Star shaped white to yellowish green flowers. Worcester Botanic Garden.

Tubular whitish flowers tinged pink. Worcester botanic garden.

Cup-shaped cream to pinkish flowers. West Coast NP 2014.

Similar to C.natans. Nieuwoudtville, West Coast NP, Ceres.

Crassula sp. Crassula spp.

Tylecodon paniculatus

Tylecodon ventricosus Tylecodon wallichii

Cucurbitaceae Citrullus lanatus Kedrostis nana

Cunoniaceae Cunonia capensis

Platylophus trifoliatus

Curtisiaceae Curtisia dentata

Cytinaceae ( = Rafflesiaceae) Cytinus sanguineus

Dipsacaceae Scabiosa africana Scabiosa columbaria

Droseraceae Drosera aliciae Drosera cistiflora

Drosera glabripes Drosera hilaris Drosera pauciflora Drosera trinervia

Ebenaceae Diospyros austro-africana Diospyros glabra Diospyros whyteana Euclea racemosa

Euclea tomentosa Euclea undulata

Ericaceae Erica abietina Erica baccans Erica bicolor

Erica brachialis Erica bruniades Erica bruniifolia Erica caffra Erica capitata

Erica cerinthoides Erica coccinea Striking pink flower spikes. Koppie north of Ceres 2009. A few other species were unidentified.

Distinctly shaped with tree-like fleshy trunk. In leaf. Near Nieuwoudtville, and Cederberg. Tanqua Karoo 2017. In leaf. Nieuwoudtville, Verloren Vlei.

Day 5, fields. West Coast National Park.

Butterspoon Tree. Kirstenbosch. Other species of the genus occur in New Caledonia. White-alder. Tree with trifoliolate leaves. Greyton 2019 (PGC).

Kirstenbosch.

1 of this root parasite in dunes at De Hoop was a highlight in 2013. A group of three found in 2014 at a nearby site. A scarce species.

Shrublet to 1m. Roadsides near Cape Point. Small Scabious. Native here as well as in Europe. Day 8 roadsides, very tall! 2018.

In leaf Fernkloof and Kogelberg, 2019. Narrow leaves up stem. Large flowers. Waylands where a variety of colours, and Fernkloof. Fernkloof. Kirstenbosch, in leaf, and in flower at Ceres. Stemless with large flowers. In fine flower at Waylands, and Ceres. Rosettes of reddish leaves. Kirstenbosch, rosettes. Cape Point, in flower. Ceres, Fernkloof, and Kogelberg.

Nieuwoudtville. Near Ceres. Rooisand. Bladder-nut. Kirstenbosch. Boulders, West Coast NP, *Babiana ringens* site, and De Hoop. Locally dominant. Nieuwoudtville. Worcester botanic garden.

Large tubular red flowers. Cape Peninsula 2011. Berry Heath. Globose rose-pink flowers. Kirstenbosch 2019. Robust shrub, pale pink flowers, brown stamens. Greyton 2018 and 2019 (PGC). Large tubular green flowers. Cape Point 2012. Woolly pink flowers. Kleinmond. Drooping heads of white flowers. De Hoop limestone. Water Heath. Kirstenbosch. Plant hairy, and globose flowers very hairy. In fruit at Cape Point *Mimetes hirtus* site, 2014. A rare species. Fire Heath. Tight clusters of tubular red flowers. Houwhoek and Fernkloof. De Hoop limestone, yellow flowered form. Large tubular flowers with

protruding anthers. Also Fernkloof. The distinctive Erica at Shaw's Pass in 2014 was var.intermedia. Erica coriifolia Urn-shaped pink flowers. Cape Point, locally common. Erica corydalis White Petticoat Heath. Spherical white flowers. This at Houwhoek? Erica cristata Distinctive 'cockscomb anthers', Rooisand, 2014. Shrub with showy pink flowers. Near Ceres 2019. Erica cristiflora The common pink flowered species at Grootvadersbosch, colouring the Erica cubica hillside. 2009. Erica cumuliflora Small flowers in dense heads, white with erect dark brown lobes. Fernkloof. Erica curtophylla Pink flowers, on long pedicels, thick slightly curved leaves, prominent style and stigma. Agulhas 2018 (PGC). Erica curviflora Water Heath. Large tubular red flowers. In impressive flower at Greyton, streamsides, 2018and 2019 (PGC). Recorded? Erica dodii Erica ecklonii Small tubular white flowers in terminal heads, 4 exserted anthers. Fernkloof. Erica ericoides Urn shaped pale pink flowers with four protruding anthers.Cape Point, in leaf. Erica exleeana Sticky with very small flowers, stigma far exserted. Cape Point. 2014. Low shrublet with terminal heads of small tubular pink flowers with 4 Erica globiceps exserted anthers. Harold Porter Botanic Garden fynbos, very common. 2018. Erica hirtiflora Numerous small hairy ovoid pink flowers. Kirstenbosch, locally common. Erica hispidula Small urn to bell shaped flowers, white, pink, or red. Common in Houwhoek area. Erica imbricata Small calycine flowers, white or pink with exserted anthers. Locally common. Cape Point. Rooisand. Erica labialis Terminal heads of small to medium tubular pink flowers with four exserted anthers. Cape Point. Large tubular flowers of variable colour. Caledon Botanic Garden fynbos Erica longifolia 2019 (PGC). Small to medium yellow to white flowers, 'pointed'. Fernkloof. Large dark red tubular flowers. De Hoop limestone 2018. Small pink flowers. Kirstenbosch fynbos 2019. Tiny flowers with very large stigma. Cape Point 2019. Small pink flowers, plumose stem hairs. Kirstenbosch fynbos, new in 2019. Large tubular yellow flowers. In flower in marshes at Betty's Bay, and Kleinmond. Erica perspicua Prince-of-Wales Heath. Pink flowers with white tips. Betty's Bay. Red tubular flowers with protruding anthers. Kirstenbosch, Cape Point, Houwhoek, Fernkloof. Flowers small, urn-shaped, deep pink. De Hoop dunes 2018. Attractive spikes of pink flowers. De Hoop, 2018. Very small pink or white flowers. Houwhoek area. Bottle Heath. Sticky pink flowers. In fine flower in Harold Porter fynbos 2018. Erica rhopalantha Broadly urn shaped dark pink flowers. Harold Porter botanic garden Fynbos 2018. Erica scytophylla Flowers small, urn-shaped, pink with darker exserted anthers. De Hoop limestone, over this year. Large tubular light green flowers. Fernkloof. Small pink flowers. Harold Porter botanic garden fynbos 2018. 2019 in the last few days. Erica tristis Small flowers. Cape Point, 2019. Small, narrowly ovoid, pink, shiny, with four exserted stamens. De Hoop 2010. Large tubular flowers, Kirstenbosch, where naturalised. Shrublet with small woolly white flowers. Fernkloof. Several unidentified, including at Ceres, Nieuwoudtville waterfall.

Erica lutea Erica mariae Erica mauritanica Erica muscosa *Erica paniculata* Erica patersonii

Erica plukenetii

*Erica propinqua* Erica pulchella Erica quadrangularis Erica retorta

Erica sessiliflora Erica sitiens

Erica vernicosa

Erica versicolor Erica villosa *Erica* spp.

Euphorbiaceae *Clutia* are shrubs with alternate leaves, inconspicuous flowers, male and female on separate plants. Clutia alaternoides Kirstenbosch and Cape Point. Day 5, 2010. Clutia ericoides Fernkloof and Caledon. Clutia polygonoides Clutia pulchella Kirstenbosch. Clutia thunbergii Nieuwoudtville. Euphorbia braunsii Tanqua Karoo 2014. Euphorbia burmanii Shrublet with leaves soon falling to leave green twiggy stems. West Coast NP. Euphorbia caput-medusae Medusa's Head. Shrublet with rosette of club-shaped branches. Cape Point, West Coast NP, and numerous in dunes north of Veldriff. **Ouiver Tree Forest.** Euphorbia decussata Euphorbia ecklonii Leaves pressed to the ground, elliptic. De Hoop flats. Euphorbia esula Leafy Spurge. Alien. Scattered records. e.g. Observatory. Euphorbia erythrina Woody perennial. De Hoop. Euphorbia foliosa Day 13, 2010. Linear leaves. Waylands, Ceres area, and Cederberg. *Euphorbia genistoides* Euphorbia helioscopia Sun Spurge. Alien. Observatory. Euphorbia loricata Impressive spiny shrub. Cederberg lunch slopes. Euphorbia mauritanica Shrub with yellow petal-like glands. Locally common, e.g. West Coast National Park. Euphorbia multiceps This species, Karoo, 2013? Euphorbia peplus Petty Spurge. Alien. Scattered records, e.g. Observatory. Euphorbia silenifolia Similar to E.tuberosa but leaves narrower. Ceres. Worcester Botanic Garden and Verloren Vlei. (E.arcuethobioides). Euphorbia tenax Euphorbia tuberosa Stemless with long narrow leaves. Cape Point, West Coast National Park, Tienie Versveld, Houwhoek. Euphorbia sp. Spiny cushion at Gannaga Pass 2009. Sprawling annual, under shrubs. West Coast National Park. Leidesia procumbens Annual Mercury. Alien. Cape Town, Harold Porter, etc. 2018. Mercurialis annua Ricinus communis Castor Oil Plant. Alien. Mitchell's Pass 2017. Fabaceae Acacia karroo Locally numerous as in the Karoo. The following alien acacias, all from Australia, are widespread:-Acacia baileyana Acacia cyclops Acacia dealbata Acacia elata Acacia longifolia Acacia mearnsii Acacia melanoxylon Acacia podalyriifolia Acacia pycnantha Acacia saligna Aspalathus albens Small pale yellow flowers fading to rose. Sandveld, Babiana ringens site. Fleshy hairless shrub with showy yellow flowers. Cape Point, new in Aspalathus capensis 2019. Shrub, flowers in terminal heads, yellow, standard partly red. Cape Point. Aspalathus carnosa Violet flowers in spikes or heads. Cape Peninsula, ssp.violacea. 2018. Aspalathus cephalotes Aspalathus chenopoda Three-foliolate leaves with needle-like leaflets. Bright yellow flowers. Greyton (PGC). Yellow flowers. Ceres. Aspalathus ericifolia Shrub with white flowers. Cape Agulhas 2018 (PGC). Aspalathus forbesii Terminal heads of almost white flowers with keel tipped violet. De Hoop Aspalathus globulosa limestone. Bright yellow flowers, keel and calyx shortly hairy. Nieuwoudtville. Aspalathus hirta

Aspalathus hispida Flowers pale yellow to white. Waylands. Narrow leafy spikes with yellow flowers. De Hoop limestone, not in Aspalathus incurvifolia flower this year. Rooibostee. Pakhuis Pass, and in leaf in Harold Porter Botanic Garden Aspalathus linearis fynbos. 2018. Only seen in cultivation this year. Hairy needle-like leaves, showy yellow flowers. Houwhoek, new in 2019. Aspalathus neglecta Shrublet with slate-blue to violet flowers. Caledon, Napier. Aspalathus nigra Aspalathus retroflexa Sprawling with single flowers. De Hoop limestone? Aspalathus rosea Shrublet with pink flowers. Aspalathus sericea Fernkloof and Houwhoek. Aspalathus spinosa Day 5, 2010. Aspalathus spinescens Thorny shrub with yellow flowers. Babiana ringens site. Aspalathus ternata Pale yellow flowers fade purplish. Sandvelt east of Velddrif, 2009. Possibly day 5, 2011. Greyton 2019 (PGC). Aspalathus tridentata A number were not identified, several this year, especially in the last two Aspalathus spp. days. A very large genus. Bolusafra bituminosa Tar Pea. Bitumen scented, with yellow flowers. Kirstenbosch, not in flower. Shrub with yellow flowers. West Coast NP, locally dominant. (Lebeckia Calobota angustifolia *multiflora*). Calobota cytisoides Silvery shrub with bright yellow flowers. Cederberg lunch slope 2012. (Lebeckia cytisoides). West Coast National Park. (Lebeckia sericea). Calobota sericea Crotalaria excisa Subshrub with yellow flowers. Tienie Versveld, Postberg, and Seeberg. Cyclopia maculata Shrub with yellow flowers. Harold Porter botanic garden fynbos 2018. Dipogon lignosus Cape Sweet Pea. Large trifoliate leaves and racemes of pink flowers. Kirstenbosch and Fernkloof. Dolichos decumbens Creeping with heads of strongly sweet-scented purple flowers. Nieuwoudtville. Not seen 2014, 2017, 2018, or 2019! Shrub with striking racemes of magenta flowers. Grootvadersbosch 2009. *Hypocalyptus coluteiodes Hypocalyptus oxalidifolius* Sprawling shrublet, leaves resemble sorrel leaves. Delicate sprays of pink flowers. Fernkloof upper cliffs. *Hypocalyptus sophoroides* Shrub with showy pink flowers. Greyton 2019 (PGC). *Indigofera* are herbs or shrubs with pink flowers, the keel petals with a sac or spur. Indigofera alopecuroides Shrublet, leaflets densely hairy. Fernkloof. Indigofera alternans The plant with superbly impressive pods north of Nieuwoudtville was identified as this in 2017, but this name is not in PGCFR.2. Seen again this year. Indigofera capillaris Shrublet. Fernkloof. Indigofera cytisoides Shrub, in fruit. Locally common on slopes at Fernkloof. Indigofera digitata Flower stalks long. Rooisand 2018. Indigofera filicaulis Shrublet, Thread-like peduncles more than twice length of leaves. Houwhoek. Indigofera filifolia Shrub to 3m, leaves sparse. Cape Point. Shrublet, wiry stems, pink to red flowers with standard densely silky on Indigofera filiformis back. Kirstenbosch. Shrublet with racemes of purple flowers. Houwhoek, Cape Point, and Indigofera glomerata Kogelberg. Indigofera heterophylla Prostrate with bright pink flowers. Nieuwoudtville. Indigofera incana Shrublet, leaflets coarsely long-hairy. Observatory and Tienie Versveld. Indigofera meyeriana Shrublet. Stems furrowed, often greyish. Day 8, 2011. Trailing shrublet, leaves 1-foliolate. Franschhoek Pass 2017. Indigofera ovata Indigofera procumbens Trailing with erect racemes of orange to purple flowers. Tienie Versveld, West Coast NP. Indigofera spp. Several were unidentified.

Lebeckia are shrubs or herbs with a woody base. Racemose yellow flowers.			
Lebeckia leipoldtiana	Thorny shrublet with yellow flowers. Nieuwoudtville.		
Lebeckia pauciflora	Standard partly purple, keel spirally twisted. Pakhuis Pass.		
Lebeckia plukenetiana	Spikes of yellow flowers. Leaves 1-foliolate. Tienie Versveld.		
Lebeckia sepiaria	Leaves articulated near centre. Yellow flowers. West Coast National Park.		
Lessertia frutescens	Sutherlandia. A striking small shrub with red flowers and large swollen papery pods. Widespread and locally common.		
Lessertia inflata	Small shrublet, grey hairy, flowers pink with purple keel, pod inflated. Recorded 2014.		
Lessertia microphylla	North of Nieuwoudtville and Knervslakte.		
Lessertia miniata	Flowers orange-red. De Hoop dunes.		
Lessertia rigida	Spinescent subshrub, pink to purple flowers. West Coast NP lunch site 2018.		
Liparia parva	Prostrate shrublet, with globose racemes of pale yellow-green flowers. Rodent pollinated. Cape Point, several in flower, and many in fruit.		
Lotononis argentea	Shrublet with attractive blue flowers on slender peduncles. Ceres, new in 2019.		
Lotononis falcata	Annual, flowers yellow fading orange. Bloukrans Pass 2014.		
Lotononis hirsuta	Sprawling softly hairy, with yellow flowers with brown flecks on standard. Nieuwoudtville, Hantam and wild flower reserve.		
Lotononis leptoloba	Annual, yellow flowers. North of Nieuwoudtville.		
Lotononis maximiliani	Annual with blue flowers. North of Nieuwoudtville 2018.		
Lotononis pungens Lotononis umbellata	Shrublet with yellow flowers. West Coast NP 2018.		
Lotononis umbellata	Prostrate with clusters of yellow flowers. Kirstenbosch fynbos.		
Lotus corniculatus	Bird's-foot Trefoil. Alien.		
Lotus subbiflorus	Alien.		
Lupinus angustifolius	Narrow-leaved Lupin. Alien. Nieuwoudtville etc.		
Lupinus luteus	Yellow Lupin. Alien. Scattered records.		
Lupinus varius	Alien. Scattered records.		
Medicago arabica	Spotted Medick. Alien.		
Medicago lupulina	Black Medick. Alien.		
Medicago polymorpha Medicago asting	Toothed Medick. Alien. Locally common. Lucerne. Alien. A few records.		
Medicago sativa Melilotus indicus	Small Melilot. Alien. Scattered records.		
Melilotus sp.	Shan wonot. A nen, Seattered records.		
Ornithopus compressus Ornithopus sativus	Alien. A few records. Cultivated Bird's-foot. Alien. Darling area.		
Otholobium bracteolatum	Sprawling shrub with blue and white flowers. Seeberg bird hide.		
Otholobium sabulosum	Shrublet with white and purple flowers. De Hoop limestone. Now called		
	sp.1 in PGCFR.		
Podalyria, Cape Sweetneas, are silvery hai	ry shrubs, with simple leaves and pink purple or white flowers.		
Podalyria argentea	Shrublet, bracts broadly ovate. West Coast NP.		
Podalyria biflora	Shrublet, bracts lanceolate. Caledon 2018. Greyton 2019 (PGC).		
Podalyria calyptrata	Small tree to 5m. Widespread in the south of the area, e.g. Kirstenbosch.		
Podalyria hirsuta	Shrub to 3m. Franschhoek Pass 2017.		
Podalyria myrtillifolia	Shrub. De Hoop limestone.		
Podalyria oleaefolia Podalyria pearsonii	Willowy resprouting shrub. Harold Porter botanic garden fynbos 2018. Willowy shrub to 1m. Flowers magenta pink and white. South of		
ι σααιγια ρεαινοπα	Nieuwoudtville, 2018.		
Podalyria sericea	Shrublet to 1m. West Coast and Cape Point.		
Prosopis glandulosa	Mesquite. Naturalised and numerous in the Karoo.		
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Psoralea aphylla Psoralea pinnata	Broom-like shrub with blue flowers, keel white. Cape Point 2018. Tree with narrowly pinnate leaves and purple flowers. Fernkloof,
Psoralea restioides	common. Shrublet, blue to purple flowers with large white nectar patch. Fernkloof.
Psoralea usitata Psoralea sp.	Shrub with leaves reduced to scales. Fernkloof 2019. Michell's Pass, a species awaiting description.
Rafnia, Ink Peas, are hairless and bluish, wi	1
Rafnia amplexicaulis Rafnia capensis ssp.pedicillata Rafnia ovata	Shrub with clasping leaves. South of Nieuwoudtville 2018. Hairless with terminal heads of yellow flowers. Betty's Bay burn 2009. Erect shrub, large solitary flowers. South of Gordon's Bay (PGC) 2009.
Rhynchosia capensis Rhynchosia ferulifolia	Decumbent shrub with yellow flowers. Kirstenbosch. Sprawling subshrub with yellow flowers. Harold Porter botanic garden Fynbos 2018.
Spartium junceum Tephrosia capensis	Spanish Broom. Alien. Subshrub with pinnate leaves and pink or purple flowers. De Hoop.
Trifolium angustifolium	Narrow-leaved Crimson Clover. Alien. Tulbagh etc.
Trifolium arvense	Hare's-foot Clover. Alien. Kirstenbosch and Tulbagh.
Trifolium campestre	Hop Trefoil. Alien. Napier.
Trifolium dubium	Lesser Trefoil. Alien. Cape Town etc. Hairy Trefoil. Alien. Ceres, near Mamre, etc.
Trifolium hirtum Trifolium repens	White Clover. Alien. Scattered records.
Trifolium stipulaceum	Native. Day 3, 2010.
Trifolium subterraneum	Subterranean Clover. Alien. Nieuwoudtville 2018.
Vicia benghalensis	Alien. Widespread and locally common, e.g. Observatory and Waylands.
Vicia hirsuta	Hairy Tare. Alien. Kirstenbosch.
Vicia lutea	Yellow Vetch. Alien. Tienie Versveld.
Vicia sativa	Common Vetch. Alien. Observatory etc.
Virgilia divaricata	Small tree, leaflets glabrescent. Fernkloof, naturalised.
Virgilia oroboides	A pink flowered tree, leaflets finely hairy beneath. Kirschtenbosch.
Wiborgia, Pennypods, are shrubs with yello	w flowers, and woody pods that are rounded and winged.
Wiborgia monoptera	Pale yellow flowers. Nieuwoudtville, locally common. Fruit has broad dorsal wing.
Wiborgia tetraptera	Flowers whitish flushed purple. Nieuwoudtville, in fruit, which has dorsal, ventral, and lateral wings.
Xiphotheca reflexa	Silver Pea. Shrublet with silvery leaves and yellow flowers at branch ends. Rooisand 2012.
Fagaceae	
Quercus robur	Pedunculate Oak. Alien. Tolhuis, Michell's Pass.
Frankeniaceae	
Frankenia pulverulenta	Sea Heath. West Coast National Park, coast stop. 2018.
Fumariaceae	
Cysticapnos vesicaria	Climbing annual with small pink flowers and inflated fruits. <i>Babiana</i> <i>ringens</i> site, Darling area, West Coast NP, Nieuwoudtville, Worcester Botanic Garden, etc. Locally numerous, especially in Nieuwoudtville wild flower reserve.
Fumaria muralis	Alien. Widespread.
Trigonocapnos lichtensteinii	Twining annual with long racemes of pink flowers. Nieuwoudtville wild flower reserve and waterfall.
Gentianaceae Chironia baccifera	In fruit, red berries, Kirstenbosch and De Hoop.

Chironia tetragona	De Hoop limestone, in superb flower this year.
Chironia spp.	
Lagenias pusillus	Annual with small yellow flowers. Rooisand 2017.
Orphium frutescens	Shrublet with striking pink flowers. Betty's Bay.
Sebaea albens	Four petals, white or yellow.
Sebaea aurea	Four-lobed flowers. This species Kogelberg?
Sebaea exacoides	Flowers yellow or white with orange streaks in throat, five-lobed. Scattered
	records, e.g. Napier, Rooisand, West Coast National Park.
Sebaea micrantha	Yellow 5-lobed flowers. De Hoop 2017.
Sebaea zeyheri	Yellow 5-lobed flowers. Day 13, 2010.
Sebueu zeynen	Tenow 5-100ed nowers. Day 15, 2010.
Geraniaceae	
Erodium botrys	Alien.
Erodium cicutarium	Common Stork's-bill. Alien. Widely naturalised.
Erodium moschatum	Musk Stork's-bill. Alien. Widespread.
Geranium incanum	Kirstenbosch.
Geranium molle	Dove's-foot Crane's-bill. Alien. Cape Town etc.
Monsonia (= Sarcocaulon)	
Monsonia crassicaule	Spiny succulent with large yellow flowers and long typical stork's-bill
	fruits. Quiver Tree Forest.
Monsonia salmoniflora	Pink Candle Bush. Spiny shrub with pink flowers. Tanqua Karoo 2012.
Monsonia speciosa	Not spiny. Flowers white to pink. One in flower at Tienie Versveld.
Pelargonium	
	hern Africa' by Van der Walt (and Vorster, volume 3), various publishers, is the
standard work on the genus.	
Pelargonium alchemilloides	Leaves round, lobed, often with reddish zonal marking, which, as the
	name suggests, resemble Alchemilla leaves. In flower at Caledon.
Pelargonium anethifolium	Finely divided umbellifer like leaves, umbels of yellowish green flowers.
	Nieuwoudtville waterfall 2018.
Pelargonium articulatum	Leaves round and silky hairy, often with reddish zonal marking. In leaf at
C C	Nieuwoudtville wild flower reserve.
Pelargonium betulinum	Shrub. Leaves somewhat leathery. White to pink flowers. De Hoop
0	limestone, in leaf this year.
Pelargonium candicans	This species at Houwhoek?
Pelargonium carneum	Shaw's Pass. Karoo BG. 2014.
Pelargonium capitatum	Widespread, e.g. Kirstenbosch, West Coast NP, Rooisand, Cape Point.
Pelargonium chamaedryfolium	Annual, red stems, simple leaves, small flowers. Houwhoek 2019.
Pelargonium coronopifolium	Rough haired linear slightly toothed leaves. South of Nieuwoudtville,
i ciargoniam coronopijonam	2018.
Pelargonium crispum	Shrublet with rough fan-shaped leaves with crisped margins. De Hoop
0	2019.
Pelargonium cucullatum	Large leaved shrub. Kirstenbosch, Cape Point, West Coast NP, Rooisand.
Pelargonium echinatum	Stem succulent. Stem with thorny stipules. Pinnate leaves densely white
0	hairy below. North of Nieuwoudtville.
Pelargonium fragrans?	West Coast National Park, 2014.
Pelargonium fulgidum	Scarlet flowers. Common in West Coast NP.
Pelargonium gibbosum	In leaf, West Coast NP and Cape Point.
Pelargonium grossularioides	Dwarf annual, leaves cordate or lobed, flowers purple. Houwhoek.
Pelargonium hermanniifolium	Harsh leaves in two opposite rows, large pink flowers. Greyton 2018
1 etargonium nermanniijoitum	and 2019 (PGC).
Pelargonium hirtum	Flowers dark pink. West Coast NP lunch site.
Pelargonium incarnatum	Beautiful almost actinomorphic flowers, pink with red centre and ring.
0	Houwhoek, new in 2019.
Pelargonium lobatum	Geophyte, softly hairy leaves, flowers black with yellow margins. West
	Coast National Park.
Pelargonium magenteum	Magenta-purple flowers. Botterkloof and Englishman's Grave.
Pelargonium multiradiatum	Geophyte, leaves pinnatisect, petals black with narrow pale yellow
	margins. West Coast lunch site.
Pelargonium myrrhifolium	Leaves divided into narrow lobes. Pink flowers with darker markings.
	Leaves urvided into nation loves. Flik nowers with darker markings.

Pelargonium nanum	Kirstenbosch, Cape Point, Darling, West Coast NP, Rooisand etc. Annual with lobed cordate leaves. Ceres 2019.
Pelargonium papilionaceum	Butterfly Pelargonium. Shrub with showy flowers, upper two petals much larger than other three. Greyton 2019 (PGC).
Pelargonium patulum	Leaves cordate to round, margin variously incised, leathery, glaucous, usually with reddish zonal marking. Ceres roadside, in leaf.
Pelargonium rapaceum	Geophyte, white, yellow or pink flowers. Greyton 2019 (PGC).
Pelargonium scabrum	Shrub. Deeply lobed lemon scented leaves. White to pink flowers. West of Clanwilliam, Pakhuis Pass, Van Rhyn's Pass.
Pelargonium senecioides	Annual, leaves pinnatifid, flowers white with purple markings. Sandvelt, <i>Babiana ringens</i> site.
Pelargonium strigifolium Pelargonium suburbanum	South of Gordon's Bay. 2014. Two upper petals much wider. De Hoop.
ssp.bipinnatifidum	
Pelargonium tabulare	Shrublet, leathery round leaves, flowers purple. Scattered records in leaf. In flower Ceres.
Pelargonium triste	Basal tuft of leaves. Pale yellowish flowers with darker markings on long peduncle. Observatory, <i>Babiana ringens</i> site, Darling area, Middleberg Pass, Tulbagh, Caledon, Cape Point, etc.
Pelargonium sp.	Tulbagh, trefoil leaves, 2018, not found again this year.
Grubbiaceae Shrubs, Inflorescence a small avillary cone	-like cluster. Flowers minute, reddish, and star shaped. Sepals 4, petals
absent. Ovary inferior. Endemic to Cape Fy	
Grubbia rosmarinifolia	Ericoid shrublet. Woolly white flowers. Kogelberg.
Grubbia tomentosa	Shrublet. Flowers in cone-like axillary clusters, pinkish. Fernkloof.
Kiggelariaceae	
Kiggelaria africana	Wild Peach. Kirstenbosch.
Lamiaceae	
Ballota africana	Whorls of purple flowers. West Coast NP, locally common.
Lamium amplexicaule	Henbit Deadnettle. Alien. Worcester Botanic Garden 2018.
Leonotis leonurus	Whorls of orange tubular flowers. De Hoop.
Plectranthus fruticosus	Greyton 2019 (PGC).
Plectranthus neochilus	Day 14, 2010.
Salvia africana-caerulea	Blue flowered grey-hairy leaved shrub. Darling area and Ceres.
Salvia africana-lutea	Golden-brown flowered grey leaved shrub. Cape Peninsula, West Coast NP, Darling area, De Hoop.
Salvia chamelaeagnea	Blue flowers, leaves glabrescent. Nieuwoudtville wild flower reserve.
Salvia dentata	Blue flowers, leaves grey-hairy and toothed to pinnatifid. Nieuwoudtville waterfall.
Salvia disermas	Glandular hairy, leaves roughly hairy and ovate, whitish to mauve flowers. Roadsides at Nieuwoudtville.
Salvia lanceolata	Dull pinkish flowers. Babiana ringens site.
Salvia verbenaca	
Stachys aethiopica	White to pink flowers. West Coast NP, west of Clanwilliam, De Hoop, Ceres, Fernkloof.
Stachys arvensis	Field Woundwort. Alien. Observatory, Kirstenbosch, etc.
Stachys aurea	Yellow flowers. Gannaga Pass 2009.
Stachys rugosa	Grey shrub, pink flowers, foetid. Nieuwoudtville wild flower reserve, in leaf this year.
Limeaceae	
Limeum aethiopicum	Nieuwoudtville.
Limeum africanum	Small green and white flowers. Mamre, West Coast NP etc.
Linaceae	
Linum africanum	Yellow flowers. De Hoop, several in flower.
Linum perenne	Perennial Flax. Alien. Napier to Caledon roadsides, 2017.
Linum quadrifolium	Leaves in whorls of four, flowers yellow. Kirstenbosch fynbos, several

in bud.

Loranthaceae	
Septulina glauca	Stem parasite with tubular flowers greyish green flushed red. On <i>Lycium</i> , West Coast NP.
Malvaceae	
Anisodontea anomala	Pink flowers, strongly scented. Nieuwoudtville 2018.
Anisodontea biflora	Ceres area (from vehicle!). 2014.
Anisodontea scabrosa	Small pink flowers. De Hoop limestone 2018.
Grewia occidentalis	Shrub with pink flowers. This species at Worcester Botanic Garden?
	h small yellow, red or pink flowers with spirally twisted petals and globular
	enus with many recently discovered and as yet undesribed species.
Hermannia alnifolia	Grey-mealy shrub with small yellow flowers. Kirstenbosch, Darling area and Nieuwoudtville.
Hermannia althaeifolia	Mealy-grey shrublet with yellow flowers. Darling area and West Coast National Park.
Hermannia angularis	Red flowers. Houwhoek.
Hermannia angustibracteata	Scented orange flowers. <i>Babiana ringens</i> site.
Hermannia cernua	Cream flowers. A very distinctive species at Nieuwoudtville, 2017.
	But this name is not in PGCFR. It is in the Nieuwoudtville Wild
	Flower Guide. Synonomy?
Hermannia concinnifolia	Shrublet with yellow flowers. Distinctive 'ranked'leaves. Apparently
5	variable. Many at De Hoop.
Hermannia confusa	Shrublet with yellow flowers. Ceres.
Hermannia cuneifolia	Twiggy shrub with yellow flowers. Pakhuis Pass 2018.
Hermannia diversistipula	Flowers yellow, orange, or red. This at De Hoop?
Hermannia flammea	Shrublet with dark red flowers.
Hermannia grandiflora	Beautiful deep pink flowers. Usually in fine flower in Tanqua Karoo.
Hermannia heterophylla	Sprawling shrublet with mauve flowers. West Coast NP.
Hermannia hyssopifolia	Cream to pale yellow flowers. Observatory, Kirstenbosch.
Hermannia johanssenii	Grey shrublet with nodding deep yellow flowers. Nieuwoudtville wild flower reserve.
Hermannia joubertiana	Small red flowers in tight clusters. De Hoop.
Hermannia multiflora	Grey-mealy shrub with yellow flowers. Cape Peninsula.
Hermannia myrrhifolia	Shrublet with red and yellow flowers. Day 3, 2010.
Hermannia pinnata	Shrublet with yellow flowers. Tienie Versveld, West Coast NP.
Hermannia saccifera	Yellow flowers.
Hermannia spinosa	Spinescent shrublet, flowers dark pink to red. Tanqua Karoo 2014.
Hermannia ternifolia	Grey-mealy shrublet with orange to red flowers. De Hoop.
Hermannia trifoliata	Red flowers on erect branches. De Hoop, locally very common.
Hermannia trifurca	To 1.5m. Mauve flowers. West Coast NP, west of Clanwilliam, Botterkloof Pass.
Hermannia verdoorniae	Shrublet with nodding pink flowers. Nieuwoudtville, Hantam. Not seen 2017, 2018, or 2019.
Hermannia spp.	Many others not identified, several at De Hoop.
Hibiscus trionum	Alien. South of Gordon's Bay (PGC) 2009.
Lavatera arborea	Tree Mallow. Alien.
Malva parviflora	Least Mallow. Alien.
Malva pusilla	Small Mallow. Alien. Nieuwoudtville 2018.
Radyera urens	Karoo Pumpkin. Resembles a cucurbit. Red flowers. Tanqua Karoo, one plant. 2014.
Meliaceae	

Nymania capensis Chine

Chinese Lanterns. Worcester botanic garden, both wild and planted.

#### Melianthaceae

Trees or shrubs. Racemes of green, brown or red flowers. Sepals 5, petals 4 or 5.Melianthus comosusFlat leaves, racemes with one flower at each node. Nieuwoudtville wild

Melianthus elongatus	flower reserve, in very poor condition this year. Leaf margins rolled under, racemes of 2 to 4 flowers at each node.West Coast NP. Not seen 2018.
Melianthus major	Large greyish leaves and long stalked racemes of maroon flowers. Scarce this year, e.g. Cederberg, Breede River Valley.
Menispermaceae	
Cissampelos capensis	Sprawling or climbing shrublet. <i>Babiana ringens</i> site, Waylands, West Coast NP, locally very common.
Molluginaceae	
Adenogramma glomerata	Annual with small axillary clusters of white flowers. Nieuwoudtville. Ceres.
Adenogramma lichtensteiniana Hypertelis salsoloides	Fernkloof. Dwarf shrublet. Fleshy leaves. 8mm white/pink flowers. Tanqua
	Karoo 2012.
Pharnaceum aurantium	Shrublet, white flowers on long purplish white-glaucous peduncles. Nieuwoudtville 2017.
Pharnaceum elongatum	Shrublet, stipules cut to base into hair-like lobes. Cape Point.
Pharnaceum lanatum Pharnaceum lineare	Stipular hairs form a woolly mass. West Coast NP. Leaves in whorls. West Coast NP.
Montiniaceae	
Shrubs or small trees. Flowers white, regula	
Montinia caryophyllacea	Glaucous shrub with terminal white flowers. Widespread, e.g. Kirstenbosch, Nieuwoudtville, Ceres, Tulbagh, Caledon, Fernkloof.
Moraceae	
Ficus cordata	Namaqua Fig. Nieuwoudtville area.
Myricaceae	
Morella cordifolia	West Coast NP and De Hoop dunes. ( <i>Myrica cordifolia</i> ).
Morella quercifolia	Kirstenbosch, Rooisand, De Hoop, Fernkloof. ( <i>Myrica quercifolia</i> ).
Morella serrata	Cape Point, <i>Mimetes hirtus</i> site, new in 2019. ( <i>Myrica serrata</i> ).
Myoporaceae	
Myoporum tenuifolium	Naturalised at Cape Town Observatory.
Myrsinaceae	
Myrsine africana	Cape Myrtle. Kirstenbosch and Fernkloof.
Rapanea melanophloeos	Cape Beech. Kirstenbosch.
Myrtaceae	
Leptospermum laevigatum	Coastal Teatree. Dominant at Rooisand, in flower.
Neuradaceae	
Prostrate hairy annuals. Flowers yellow and	
	Flowers yellow with a green 'eye'. West Coast NP. Flowers yellow with white central area. Numerous in West Coast NP.
Ochnaceae	
Ochna serrulata	Shrub with showy yellow flowers. Kirstenbosch fynbos. Native further east.
Oleaceae	
Chionanthus foveolatus	Tree. Kirstenbosch.
Olea capensis	Tree, leaves elliptic-ovate. Kirstenbosch and Cape Point.
Olea europaea ssp.africana	Wild Olive. Leaves narrowly-elliptic. Scattered records, e.g. Kirstenbosch, Nieuwoudtville, Boulders.
Olea exasperata	Dune Olive. Small tree with linear-oblong leaves. West Coast NP dunes and De Hoop dunes.

Oliniaceae Olinia ventosa Hard Pear. Kirstenbosch. Onagraceae Oenothera biennis Common Evening-primrose. Alien. Roadsides. Orobanchaceae Harveya purpurea Broadly funnel shaped pink flowers direct from the ground. A few on slope near Stanford, 2009. Rooisand 2011 and 2012. Harveya squamosa Spike of tubular orange/yellow flowers. A few in West Coast NP, and a few on roadside north of Clanwilliam (from vehicle), 2014. Hyobanche glabrata Sparsely hairy red flowered root parasite. Ceres. Hyobanche sanguinea Densely hairy crimson flowered root parasite. Cape Point, De Hoop, Ceres. Orobanche minor Orobanche ramosa Oxalidaceae Oxalis ambigua Oxalis bifida Oxalis commutata Oxalis compressa Oxalis convexula Oxalis corniculata Oxalis densa Tanqua Karoo 2012. Oxalis engleriana Oxalis flava Oxalis glabra Oxalis hirta Oxalis incarnata Oxalis lanata ssp.rosea Oxalis livida Oxalis luteola Oxalis massoniana Oxalis multicaulis Oxalis obtusa Oxalis orbicularis Rooisand 2011? Oxalis pes-caprae common. Oxalis polyphylla Oxalis purpurea Oxalis versicolor etc. Oxalis spp. Papaveraceae Argemone ochroleuca of Langebaan. Papaver dubium Papaver somniferum

Common Broomrape. Alien. Kirstenbosch. Branched Broomrape. Alien. Tulbagh 2018. Nieuwoudtville waterfall 2009. Leaves trifoliolate, leaflets bilobed to middle. Flowers rose with greenish tube, peduncle articulated. Ceres and Caledon. (?) Flowers rose, lilac or white with yellow tube. Ceres 2011? Similar to O.pes-caprae, but petiole flattened. Kirstenbosch, Observatory, West Coast NP, Ceres area etc. Geophyte with fleshy leaves. In leaf Worcester. Yellow flowers. Alien. Scattered records, e.g. Nieuwoudtville. Leaves crowded apically. Leaflets ciliate and hairy beneath. Rose flowers with yellow tube. Ceres? Leaflets narrow. In leaf at Nieuwoudtville. Flowers red, pink or white with a yellow tube. Darling area. Leaves grey-green, hairy beneath. Flowers mauve, magenta or white with sometimes elongate yellow tube. Ceres. Flowers white with greenish tube. Kirstenbosch. Pink flowers. silky leaves. Ceres. Leaflets deeply bilobed, purple beneath. Flowers rose or lilac with yellowish tube. Kirstenbosch. Yellow flowers, leaves trifoliate. Houwhoek. Hantam, numerous in leaf, stalkless leaves up the stem. Leaflets silky hairy beneath. Flowers white or pink with yellow tube and dark reddish margins. Ceres to Worcester and Rooisand 2011. Flower colour variable, often salmon. Wedge or heart shaped leaflets. Widespread and common, Cape Point, Nieuwoudtville etc. Leaves large. Flowers pale lilac with yellow tube, peduncle articulated. Yellow flowers, several on peduncle. Widespread and locally very Leaflets linear. Flowers rose lilac or white, with yellow tube and darker margins. De Hoop 2011. Leaflets ciliate, hairy beneath. Purple flowered form, scattered records. White flowers with purple margins. Cape Point, Darling area, Rooisand Several others seen but unidentified. Mexican Poppy. Alien. Roadsides north of Nieuwoudtville, and north

Long-headed Poppy. Alien. Opium Poppy. Alien. Napier 2011. Penaeaceae

Shrubs, mostly hairless. Leaves opposite in 4 ranks. Flowers yellow or pink. Sepals 4, brightly coloured and petal like. Petals absent. Ovary superior. Endemic to Cape Fynbos. Small yellowish flowers. Fernkloof and Kogelberg. Penaea cneorum Small yellow to red flowers. Kirstenbosch, Cape Point, etc. Penaea mucronata Flowers glossy pink. Cape Point and Fernkloof. Saltera sarcocolla Sonderothamnus speciosus Pink flowers, tepals c.8 mm long. Fernkloof 2018. Plantaginaceae Plantago cafra Cape Plantain. Hairy annual with linear leaves. Wild in Worcester botanic garden. Not seen 2018 or 2019. Plantago coronopus Buck's-horn Plantain. Alien. Betty's Bay. Plantago lanceolata Ribwort Plantain. Alien. Widespread. Plumbaginaceae *Dyerophytum africanum* Shrub with spikes of flowers with wrinkled calyces, corolla variously coloured. Quiver Tree Forest 2014. Flowers pink to white. Days 2 and 13, 2010. North of Simonstown 2014? Limonium longifolium Limonium perigrinum Flowers magenta. West Coast NP. Limonium scabrum Dwarf perennial, corymbs of mauve flowers. De Hoop. Winged Sea Lavender. Alien. Purple and white flowers. Nieuwoudtville Limonium sinuatum and Knervslakte roadsides. Polygalaceae Muraltia are shrubs, often ericoid, with small usually pink flowers. 110 fynbos species. Muraltia collina Axillary pink flowers on short pedicels. De Hoop. Muraltia ericoides Axillary pink flowers sessile. Cape Point. Muraltia filiformis Axillary pink flowers sessile. Leaves needle-like to linear. Cape Point 2018. Muraltia harveyana Calyx small. Flowers on short pedicels, axillary, pink. West Coast NP. Muraltia heisteria Calyx small. Flowers on short pedicels, axillary, purple. Kirstenbosch, Cape Point, Ceres, Fernkloof. Muraltia macropetala Axillary subsessile flowers, purple with white side petals. Waylands, Tienie Versveld, and West Coast National Park. Calyx small. Flowers on short pedicels, axillary, pink or white. Coastal Muraltia satureioides calcareous sands, De Hoop dunes. Muraltia spp. Several others seen but unidentified. Nylandtia are shrubs with pink flowers. Now included in Muraltia. Nylandtia scoparia Erect shrub. Pink flowers, red fleshy fruits. Scattered records, e.g. Nieuwoudtville. Thorny shrub with small pink flowers and red or orange fleshy fruits. Nylandtia spinosa Babiana ringens site. Langebaan to Nieuwoudtville etc., locally common. Inflorescence terminal, side petals unequally bilobed. Cape Peninsula Polygala bracteolata and Fernkloof. Polygala dasyphylla Inflorescence terminal, side petals entire. De Hoop limestone. Polygala garcinii Shrublet with needle-like leaves. Inflorescence terminal, side petals entire. Kirstenbosch, Waylands, West Coast NP, Rooisand. Shrub with large purple flowers. Reasonably common and widespread. Polygala myrtifolia Polygala fruticosa Shrub with opposite heart shaped leaves. Ceres area 2017. Polygala microlopha Inflorescence terminal, side petals unequally bilobed. Leaves leathery. Wild in Worcester botanic garden. Polygala peduncularis Large flowers on long peduncles. Inflorescence lateral. De Hoop limestone. Polygala recognita Inflorescence terminal, keel shorter than 6 mm. Cape Point. *Polygala refracta* Inflorescence lateral, side petals shortly bilobed. Napier. Polygala umbellata Shrublet with umble-like clusters of purple flowers. De Hoop, Caledon, and Fernkloof. Polygala spp. Several others seen but unidentified. Polygonaceae

Emex australis	Fruits spiny. West of De Hoop 2018.
Polygonum aviculare	Knotgrass. Alien.
Rumex acetosella	Sheep's Sorrel. Alien.
Rumex cordatus	Leaves ovate-cordate. Scattered records, e.g. Kirstenbosch.
Rumex crispus	Curled Dock. Alien. Day 13, 2010.
Rumex lativalvis	Leaves sagittate-hastate, long-petiolate. Babiana ringens site.
Primulaceae	
Anagallis arvensis	Scarlet Pimpernel. Alien. Widespread. Blue flowered form, scattered records. Red flowered form e.g. at Napier.
Proteaceae	
Trees or shrubs. Sometimes dioecious. Infl superior. Fruit a woody nutlet, often aggreg	orescence often with colourful bracts. Sepals 4, petals absent. Ovary
superior. I fuit a "oody haded, often aggreg	
Brabejum stellatifolium	Wild Almond. A tree. Kirstenbosch.
Diastella divaricata	Silky Puff. Shrublet with pink flowerheads. Cape Point and Houwhoek.
Diastella fraterna	Flowers white to cream. Day 14, 2010.
<i>Leucadendron</i> have unisexual flowers, the inflorescences.	female in cones formed by woody bracts, and the male in dense
Leucadendron argenteum	Silver Tree. Kirstenbosch.
Leucadendron chamelaea	Leaves linear-oblanceolate, involucral leaves slightly longer, yellow.
	Flower heads strongly scented. Ceres pm 2012.
Leucadendron coniferum	Cone scales overlapping, bracts yellow. Rooisand 2014.
Leucadendron eucalyptifolium	Involucral leaves long and yellow in both sexes. Locally common at Tradouw's Pass 2009.
Leucadendron gandogeri	Involucral leaves yellow tinged red. Houwhoek.
Leucadendron laureolum	Involucial leaves large and yellow giving a striking yellow appearance to
	the plant. Cape Point etc.
Leucadendron linifolium	Distinctive small shrub with rounded flowerheads. Rooisand.
Leucadendron loranthifolium	Blue-green leaves. Cederberg.
Leucadendron meridianum	Cone scales overlapping, leaves linear-lanceolate, silky or glabrous. De Hoop limestone.
Leucadendron modestum	Rough oblong leaves with a blunt red tip. Cape Agulhas 2018 (PGC).
Leucadendron muirii	Cone scales not overlapping, leaves dimorphic. De Hoop limestone.
Leucadendron pubescens	Leaves silvery hairy. Cederberg.
Leucadendron remotum	Leaves linear-oblanceolate, involucral leaves similar. Nieuwoudtville.
Leucadendron rubrum	Paddle-shaped leaves. Female, with top-shaped flowerheads, Middleberg pass. Male, with clustered flowerheads, Ceres. New in 2019.
Leucadendron salicifolium	To 3m with conspicuous yellow involucral bracts. Bain's Kloof Pass and
Leucuachar on sancyonan	Franschhoek Pass 2017.
Leucadendron salignum	Male involucral leaves narrow and yellow, female larger and ivory or red. Widespread. Cape Point, Ceres, Houwhoek, etc.
Leucadendron spissifolium	Involucral leaves ivory or pale green. Betty's Bay area?
Leucadendron tinctum	Involucral leaves yellow turning red. Houwhoek (PGC) 2012. Greyton
	2018 (PGC).
Leucadendron xanthoconus	Involucral leaves yellow. Cape Point.
Leucospermum, Pincushions, are shrubs or	treeswith medium to large clustered flowerheads, usually yellow or red.
Leucospermum calligerum	Grey hairy leaves, globose cream flowers. Pakhuis Pass.
Leucospermum conocarpodendron	Shrub to 5m. Bright yellow flowers. Cape Point, Cape Peninsula, Fernkloof, and Kogelberg. ssp. <i>viridum</i> .
Leucospermum cordifolium	Large orange to scarlet flowers. Houwhoek area.
Leucospermum heterophyllum	Prostrate shrublet, flowers cream fading reddish. Cape Agulhas 2018
I augo an annun han an hall a same Jam J	(PGC). Creaning with vallow flowers. Fine at Cana Doint
Leucospermum hypophyllocarpodendron	Creeping with yellow flowers. Fine at Cape Point.
Leucospermum prostratum	Flowers yellow-green fading red. Kogelberg.
Leucospermum prostratum	Mat-forming shrublet with flower heads yellow fading orange. Resprouting at Rooisand 2012.
Leucospermum rodolentum	Grey leaves and bright yellow flowers. Roadsides in sandvelt east of
	step seares and origin perior nowers, roughdes in sund vert cust of

	Velddrif 2012.
Leucospermum truncatulum Leucospermum truncatum	Short grey leaves. Yellow flowers fade to red. Houwhoek. Leaves with three apical teeth. Yellow flowers fade to orange. De Hoop limestone.
<i>Mimetes</i> , Pagoda Bushes, are shrubs or treateaves.	es with flowers in spikes at branch tips with coloured bracts or inflorescence
Mimetes cucullatus	Style red. Kleinmond, Kogelberg and Betty's Bay.
Mimetes fimbriifolius	Style red. Klemmond, Rogerberg and Betty's Bay. Style yellow with red tips. Rocky slopes Cape Point, restricted to the Cape Peninsula.
Mimetes hirtus	Involucral bracts brightly coloured, usually longer than inflorescence leaves. Style red. In peaty marshes very locally at Cape Point.
Paranormus bolusii	Leaves dissected, flower heads in cylindrical spikes. Several at Houwhoek.
Paranormus bracteolaris	Impressive spikes of pink flowers. South of Nieuwoudtville and Pakhuis Pass.
Paranormus sp.	A species at Shaw's Pass 2014.
Protea are shrubs or small trees, with flow	ers in terminal heads, surrounded by large colourful bracts.
Protea acaulos	Ground Protea. A fine addition to the list. Worcester 2013.
Protea amplexicaulis	Low shrub with distinctive cordate glaucous leaves. In leaf, and old
-	flowerheads, at Bain's Kloof Pass, 2014.
Protea aurea	Cream shuttlecock like flowerheads, Greyton 2019 (PGC).
Protea compacta	Bot River Protea. Tall and lanky, pink bracts. Kleinmond and Rooisand,
	very locally numerous.
Protea cordata	Low-growing with large cordate leaves. In leaf at Fernkloof.
Protea coronata	Bright green involucral bracts, tips curved inwards and with a white beard. Kirstenbosch and Greyton (PGC).
Protea cynaroides	King Protea. Large cup-shaped flowers with pink bracts. In leaf this year at Fernkloof, and at Cape Point. In fine flower at Kirstenbosch.
Protea eximia	Leaves oblong-ovate. In impressive flower at Fernkloof.
Protea glabra	Chestnut Sugarbush. Involucral bracts brownish. Cederberg and
Protea laurifolia	Nieuwoudtville. Cream to pink bracts, outer with horny margins, inner bearded.
	Pakhuis Pass, Nieuwoudtville waterfall, and Ceres.
Protea lepidocarpodendron	Black-bearded Protea. Cape Point, not in flower.
Protea longifolia	Inner involucral bracts not bearded, greenish to pink. Florets forming a
	black woolly cone longer than bracts. Fernkloof and Houwhoek.
Protea lorifolia	Inner involucral bracts bearded, pink or cream. Ceres.
Protea nana	Needle-shaped leaves, beautiful pendulous flowerheads with red bracts. Bain's Kloof Pass 2014.
Protea neriifolia	Green narrow oblong leaves. Houwhoek 2012 (PGC).
Protea nitida	Waboom. Foliage and bracts silvery. Kirstenbosch, Day 8, Ceres, Betty's Bay area, etc.
Protea obtusifolia	Narrow flowerheads, cream to red involucral bracts. De Hoop limestone.
Protea repens	Sugarbush. Narrow flowerheads with cream to red bracts, covered with a sticky gum. Cape Point, Ceres, Houwhoek, etc.
Protea scabra	A 'ground protea' with narrow leaves. In leaf at Houwhoek and Kogelberg.
Protea scolymocephala	Involucral bracts cream or pale green. Cape Point, from the vehicle, 2009!
Protea susannae	Leaves with sulphurous odour and involucral bracts with brown sticky
	coating. Agulhas 2018 (PGC).
Serruria, Spiderheads, have leaves divided	into very narrow segments, and often pink or silvery clustered flower heads.
Serruris acrocarpa	Solitary sweetly scented silvery pink to greenish flowers. Greyton 2019 (PGC).
Serruria adscendens	Kleinmond spiderhead. Flower heads several in clusters, creamy white. Locally common, Kleinmond and Kogelberg.
Serruria decumbens	Peninsula Whip Spiderhead. Cape Point 2017.
Serruria elongata	Flower heads several on a long peduncle, silvery pink. Fernkloof, not in
Serruria fasciflora	flower this year. Solitary silvery pink flower heads. Greyton (PGC).

Serruria flagellifolia	Slender trailing stems, leaves narrow, deep pink flowers. Houwhoek. Cryptic and easily overlooked. Not seen 2019!
Serruria glomerata	Flower heads several in clusters, cream. Cape Point in fine flower.
Serruria pedunculata Serruria rostellaris	Silvery pink flower heads, fragrant. Bain's Kloof Pass 2017. Silvery pink flower heads. In fine flower Houwhoek, 2017.
Serruria villosa	Silky leaves and solitary yellow flowerhead. Cape Point in fine flower.
Serruria sp.	Shaw's Pass 2014.
2000 m 0 F	
Ranunculaceae	
Anemone tenuifolia	In leaf at Kirstenbosch 2018.
Knowltonia vesicatoria	Yellowish flowers. Kirstenbosch. (Anemone vesicatoria).
Resedaceae	
Oligomeris dipetala	The mignonette on flats at De Hoop was in fact this native species.
	e e e e e e e e e e e e e e e e e e e
Rhamnaceae	
	icoid, flowers often grouped in heads, calyx woolly or hairy outside.
Phylica buxifolia	Shrub or small tree, leaf margins slightly revolute, grey-felted beneath.
	Cape Point and Fernkloof.
Phylica cephalantha	Cape Point.
Phylica dodii Phylica sociali dat	De Hoop limestone.
Phylica ericoides	Shrublet, needle-like leaves, flowers densely white-felted. De Hoop dunes and Cape Point.
Phylica oleaefolia	Shrub, leaves ovate, white-felted beneath. Cederberg, Van Rhyn's Pass,
i nyhed oledejohd	and Nieuwoudtville waterfall. Locally very common.
Phylica pubescens	Shrub with linear-lanceolate leaves, flowers in large flattened solitary
	capitula, surrounded by many leaves and long-villous bracts. Kirstenbosch.
Phylica pulchella	Shrublet, white flowers, in large flattened solitary capitula. No petals.
	Pakhuis Pass.
Phylica rigidifolia	Shrub, leaves linear to needle-like, rough, flowers white.
Dhuling and	South of Nieuwoudtville, and Pakhuis Pass.
Phylica spp.	Various species unidentified, e.g. at Cape Point, Nieuwoudtville, Rooisand.
Scutia myrtina	Small thorny tree, opposite ovate leathery leaves. Kirstenbosch.
Trichocephalus stipularis	Shrublet, leaves with small stipules, linear-lanceolate, rough, pink flowers
	in capitula, densely white-hairy on outside. Cape Point, Babiana ringens
	site, Rooisand, etc.
D	
Rosaceae <i>Cliffortia</i> are shrubs or small trees, flowers	unicavual on come or different plants
<i>Cliffortia arborea</i>	A very rare and local tree. Nieuwoudtville waterfall, several plants.
Cliffortia obcordata	West Coast NP 2013.
Cliffortia odorata	On slopes of Table Mountain from Kirstenbosch, 2012!
Cliffortia ruscifolia	Leaves spiny. Nieuwoudtville, Worcester, Houwhoek, Pakhuis Pass,
55 5	Caledon.
Cliffortia strobilifera	Leaves simple, linear, acute. Nieuwoudtville.
Cliffortia spp.	Others unidentified, e.g. at Pakhuis Pass, Drayton.
Rubus rigidus	Harold Porter BG streamside 2018.
Rubiaceae	
Anthospermum are shrubs or herbs with nar	row often whorled leaves. Flowers small
Anthospermum aethiopicum	Drayton.
Anthospermum bergianum	Densely hairy subshrub, 5-lobed yellowish flowers. Cape Point.
Anthopsermum galioides	This species at Franshhoek Pass, 2017?
Anthospermum spathulatum	Scattered records.
Anthospermum sp.	Ceres.
Burchellia bubalina	Tree. Grootvadersbosch 2009.
Canthium inerme	Cape Date. Kirstenbosch.
Galium capense	Scrambling glabrescent perennial. Leaves in whorls of 6 to 10.
Galium spurium	Straggling prickly annual.
Galium tomentosum	Prickly scrambling perennial, leaves in whorls of 6 to 8.

Nenax divaricata

Similar to Anthospermum. Nieuwoudtville 2010.

### Rutaceae

Trees or shrubs. Often aromatic. Frequently ericoid. Leaves dotted with oil glands. Flowers mostly white to pink. Sepals and petals 5 (rarely 4). Ovary superior.

Acmadenia are shrubs with pink or white flowers, petals often bearded.Acmadenia mundianaShrub to 1m. Pink flowers. Leaves up to 11 x 5mm. Common on De Hoop<br/>limestone.Acmadenia obtusataShrub to 30 cm. Flowers bright pink. Leaves 11 x 1.5mm. De Hoop<br/>dunes, locally dominant.

Adenandra are shrubs with showy red tinged white flowers. Stamens tipped with a stalked gland, alternating with hairy staminodes.

Adenandra brachyphylla	Leaves broadly ovate, cordate at base. Kogelberg.
Adenandra marginata	Flowers 2 to 15 in loose umbels, white, pink outside. Pakhuis Pass.
Adenandra obtusata	-
	Flowers in heads of 1 to 4. De Hoop limestone.
Adenandra uniflora	Solitary pinkish white flowers with darker medial stripe. Cape Point.
Adenandra villosa	Flowers 2 to 6 in condensed corymbs. Cape Point.
Agathosma usually has small flowers, stam	ens and staminodes 5. Disc cup-like or flat.
Agathosma bifida	Flowers in lax terminal clusters, white to intense purple.
Agathosma capensis	Sweetly spice-scented. White, pink, or purple flowers in lax terminal
	clusters. Ceres and Middleberg Pass.
Agathosma ciliaris	Flowers in terminal clusters, white or mauve. Cape Point, Houwhoek.
Agathosma collina	White flowers in dense terminal clusters. Dominant in De Hoop dunes.
Agathosma imbricata	Ericoid shrub with dense clusters of white, pink, or purple flowers. West
	Coast NP, De Hoop.
Agathosma lanceolata	This species at Cape Point?
Agathosma riversdalensis	White or purple flowers in terminal clusters. De Hoop 2018.
Agathosma serpyllacea	Leaves narrow, swollen behind tip and slightly twisted. Flowers in lax
0 12	terminal clusters, white, pink, or purple. De Hoop limestone slope.
Agathosma spp.	Others unidentified.
0 11	
Coleonema are shrubs with 5 staminodes ar	ising opposite each petal, concealed in a channel.
Coleonema album	Leaves linear-oblong, sweet-smelling, flowers white. Kirstenbosch, De
	Hoop, and Cape Point.
Coleonema juniperinum	Leaves resin-scented, flowers white. Nieuwoudtville waterfall, several in
	flower.
Coleonema pulchellum	Dense shrub with pungent sweet-smelling leaves, flowers pink. Cape
	Peninsula 2014.
Diagma are small shrubs with flowers many	y or few in inflorescence, disc cup-like with a wavy margin. Petals glabrous.
Diosma aspalathoides	Aromatic shrub to 1m. White flowers in small terminal clusters. West
Diosma aspatationaes	Coast NP, 2018.
Diosma hirsuta	Leaves alternate. Flowers white. Napier, Caledon.
Diosma subulata	Leaves mostly opposite, flowers white. De Hoop.
Diosma subulata	Leaves mostly opposite, nowers white. De noop.
<i>Euchaetis</i> are erect shrubs, with terminal so	litary, twin or aggregated flowers. Petals white to pink, transversely
bearded.	
Euchaetis burchelli	Flowers 2 at branch tips, white or pink. De Hoop limestone slope.
Euchaetis longibracteata	Upper bracts whitish, forming conspicuous involucre below flowers. De
Luciacità fongioracicata	Hoop 2019.
Euchaetis meridionalis	Ericoid shrublet with ascending folded leaves and clusters of 4 to 6 white or
	pink flowers. De Hoop, locally dominant.
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Santalaceae	
Osyris compressa	Hemiparasitic shrub. Kirstenbosch etc.
Thesidium fragile	Brittle hemiparasitic shrublet. Perianth lobes and stamens 4. De Hoop
	dunes.

Thesidium fruticulosum

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Probably this at Fernkloof.

Thesium are hemiparasites with perianth lobes and stamens 5. Thesium capitatum To 30 cm. Flowers minute and whitish in dense terminal heads. Cape Point and Fernkloof. Possibly this species at Fernkloof. Thesium carinatum Thesium commutatum *Thesium ericifolium* Shrublet to 20cm, leaves linear, flowers in terminal cymose clusters. Fernkloof. Thesium euphorbioides Shrub to 2m. Bracts broad and yellowish. Fernkloof. Thesium lineatum Rigid shrub, Flowers in short racemes on spinescent branchlets. Quiver Tree Forest not in flower. Nieuwoudtville waterfall, in flower. *Thesium pseudovirgatum* This species at Cape Point, 2013? Thesium spicatum Shrublet with flowers in dense oblong spikes. Recorded 2012. Thesium spinosum Spiny. West Coast NP. Thesium strictum Broom-like, to 2m. Scattered records, e.g. Cape Point, Pakhuis Pass, Fernkloof, Kirstenbosch. Shrublet to 50 cm. Flowers white in dense heads. Cape Point. Thesium viridifolium *Thesium* spp. Many others not identified, especially at Fernkloof and De Hoop. Some 85 species occur. Sapindaceae Small tree. Nieuwoudtville waterfall, Ceres, Michell's Pass. Dodonaea angustifolia Sapotaceae Sideroxylon inerme Milkwood. De Hoop. Scrophulariaceae Alonsoa unilabiata Annual, flowers pink to orange. Nieuwoudtville and Van Rhyn's Pass. Antirrhinum orontium Weasel's Snout. Alien. Riverside Lodge. Aptosimum indivisum Shrublet with blue and violet flowers. Leaves spine-tipped. Quiver Tree Forest Prostrate shrublet with blue and violet flowers. Karoo 2011. *Aptosimum procumbens* Chaenostoma are shrublets or woody perennials. Calyx 2-lipped, corolla with 5 more-or-less equal lobes. Stamens 4 in dissimilar pairs. Formerly Sutera. Chaenostoma caeruleum Glandular-hairy perennial. Flowers mauve or violet with a yellow tube. One at Hantam. Chaenostoma hispidum Glandular-hairy shrublet. Flowers narrowly funnel shaped, pink to mauve with a yellow throat. Cape Point, Kirstenbosch, De Hoop, and Fernkloof. Chaenostoma revolutum Glandular-hairy shrublet, flowers white, pink or mauve with a yellow tube. Ceres area and De Hoop. Glandular shrub. Pink flowers. West Coast NP, Seeberg. Chaenostoma uncinatum Annual flowers in heads, white with orange patch. Nieuwoudtville, Cromidon varicalyx Hantam. Diascia have mostly purple flowers with bright yellow windows, lower petal with pouches or spurs. This year fewer were seen than is usual. Flower spurs 13 to 19 mm long. Cederberg lunch site 2012. Diascia bicornuta Diascia capensis Flowers saccate. West Coast NP. Diascia cardiosepala Flowers solitary, mauve with purple centre. Nieuwoudtville dolerite. 2-saccate flowers, greyish magenta with dark magenta centre and yellow Diascia collina sacs and stamen-bearing boss. West Coast NP 2018. Flowers saccate. West Coast NP 2012. This species Babiana ringens Diascia diffusa site? Flowers saccate, fruiting pedicels s-shaped. Cape Point 2018. Diascia elongata Diascia floribunda Nieuwoudtville 2014. Diascia humilis Worcester botanic garden 2018. Nieuwoudtville, Hantam stop 1, 2012. Diascia lewisiae Diascia longicornis Spurs 4 to 18 mm. Cederberg stop 1, 2012. Diascia nana Worcester botanic garden.

Diascia parviflora	Flowers greyish to reddish violet with yellow windows, in racemes. Ceres 2018.
Diascia veronicoides	Dark purple flowers in racemes. Nieuwoudtville wild flower reserve, and Hantam.
Diascia whiteheadii	2 long spurs. Nieuwoudtville. Locally common.
Dischisma capitatum	Annual with white flowers in dense narrow spikes. Flowers less than 10mm long. Kirstenbosch and West Coast NP.
Dischisma ciliatum	Shrublet. Possibly this species at <i>Babiana ringens</i> site.
Dischisma spicatum	Annual, white flowers in elongate spikes, flowers over 10mm long.
	Nieuwoudtville, 2018.
Halleria lucida	Tree Fuchsia. Small tree with orange flowers. Kirstenbosch and Fernkloof.
	spikes, white usually with orange fleck at the base of petals.
Hebenstretia dentata	Annual. Nieuwoudtville, Bikoes.
Hebenstretia parviflora	Annual. Nieuwoudtville, Bikoes.
Hebenstretia repens	Annual. Anthers stalked. Kirstenbosch, Mamre, West Coast NP, Cape Point.
Hebenstretia robusta	Shrublet. Tienie Versveld.
Hebenstretia spp.	Others possibly overlooked.
Hemimeris have bright yellow flowers with	darker spots, lower lip with pouches or spurs.
Hemimeris centrodes	Flowers with 2 spurs, 3 to 6 mm long. Flowers 8 to 14 mm. Brown
Hemimeris gracilis	spots on upper lip. Nieuwoudtville dolerite. Flowers 5 to 8 mm, spurs 4 to 5 mm. Nieuwoudtville wild flower reserve.
Hemimeris racemosa	Flowers 7.5 to 13 mm, spurs very short (to 3mm). Widespread, e.g. Tienie Versveld, Fernkloof, Caledon, Worcester Botanic Garden.
Hemimeris sabulosa	Flowers saccate with invaginations over stamens. Cape Point, Waylands, West Coast NP, Nieuwoudtville, etc.
Hemimeris sp.1	Like <i>H.sabulosa</i> but clammy glandular-hairy. Flowers pale yellow. An as yet undescribed Saldanha Bay endemic listed as this in PGCFR. Seeberg, 2018.
Jamesbrittenia are shrubs or herbs with glas	nds. Corolla regular.
Jamesbrittenia albomarginata	Dwarf shrublet, flowers maroon with white margins. De Hoop.
Jamesbrittenia fruticosa	Shrublet, flowers white to purple with yellow throat. South of Calvinia 2014.
Jamesbrittenia stellata	Glandular-hairy shrublet with white or pink flowers with wedge-shped yellow to red patch at base of each lobe. Near rooms at De Hoop 2017.
Jamesbrittenia thunbergii	Annual, mauve flowers with yellow/orange throat. Quiver Tree Forest.
	ke bracts. Corolla tube cylindric, inflated at throat.
Lyperia lychnidea	Perennial, greenish flowers. <i>Babiana ringens</i> site and West Coast National Park.
Lyperia tristis	Glandular annual with starry yellow flowers. Cape Point, Pakhuis Pass, Nieuwoudtville, north of Veldriff.
<i>Manulea</i> are annual or perennial, flowers w 2-lipped.	hite, yellow, red or brown. Tubular corolla with five similar lobes or
Manulea altissima	Foetid perennial, tall, heads of white flowers, Sandveld east of Velddrif, and near Clanwilliam. 2012.
Manulea cheiranthus	Annual with brown thread like petals. Cape Point etc.
Manulea rubra	Perennial with reddish brown narrow-petalled flowers. <i>Babiana ringens</i> site.
Manulea tomentosa	Grey-hairy perennial, flowers orange to brown. Cape Point and Rooisand shores.
Microdon capitatus	Ericoid. Ovoid heads of white flowers with orange throat. West Coast NP.
Microdon dubius	Long spikes of yellow flowers. Houwhoek and Fernkloof.

Nemesia have strongly 2-lipped flowers, rather snapdragon like. Nemesia affinis Annual, variable flower colour. Scattered records, e.g. West Coast NP, Babiana ringens site, Nieuwoudtville, and Cape Point. (N.versicolor). Annual with yellow lower lip, upper lip white with broader lobes than Nemesia anisocarpa N.cheiranthus. Nieuwoudtville. Nemesia barbata Lower lip blue to blackish. Very beautiful. Waylands, Ceres, etc. Nemesia bicornis Babiana ringens site and West Coast NP, 2018. Nemesia cheiranthus Annual with yellow lower lip with long white upper petals. Nieuwoudtville, locally very common. Nemesia fruticans Shrublet, flowers pink or lilac with raised yellow palate. Seemingly wild in Worcester botanic garden. Nemesia gracilis Small yellow flowers. Swaarmoed Pass. Nemesia leipoldtii Flowers large, white with yellow patch, or purple. Nieuwoudtville, Hantam. many. Annual, flower colour variable. Nieuwoudtville 2018. Nemesia ligulata Nemesia macrocarpa Perennial, leaves ovate, flowers white to pale pink, shade at Pakhuis Pass. Oftia africana Shrub with toothed leaves and regular 5-lobed white flowers. Kirstenbosch, Cape Point, West Coast NP, Pakhuis Pass, Rooisand, etc. Shrublet, flowers violet, anthers shortly hairy. North of Nieuwoudtville, Peliostomum virgatum common at one site. Phyllopodium capillare Glandular annual with white flowers in compact heads. West Coast National Park, 2018. Annual with crowded heads of mauve flowers in branched clusters. Phyllopodium cephalophorum West Coast NP and Babiana ringens site. Polycarena aurea Glandular annual. Flowers in clusters, yellow, with upper lip white tipped yellow. Nieuwoudtville 2018. Annual. Flowers cream to white, yellow patch at base of upper lip. Polycarena batteniana Nieuwoudtville. Polycarena formosa Annual. Flowers cream to yellow, upper lobes tipped orange and with orange patch at base. Nieuwoudtville, Papkuilsfontein, 2018. Glandular-hairy annual. Probably this at Tulbagh 2019. Polycarena gilioides Polycarena lilacina Glandular annual with white to mauve flowers with basal yellow patch on upper petals. Babiana ringens site. Pseudoselago spuria Clusters of funnel shaped mauve flowers with 2 upper petals. Mamre 2009. Worcester, gone over, 2014. Pseudoselago verbenacea Glabrescent perennial, corymbs of mauve flowers with orange patches. De Hoop 2018. Selago are shrubs or herbs with small flowers often in many flowered heads. Selago albida Flowers violet. South of Nieuwoudtville 2018. Selago aspera Flowers white. De Hoop. Selago eckloniana Flowers white. Wild at Worcester botanic garden. Selago glabrata Flowers white. Nieuwoudtville, Bikoes, and Botterkloof Pass. Selago glutinosa White flowers in dense spikes. Ceres. Selago pinguicula Recorded 2013. Shrublet, mauve flowers. On rocks at Pakhuis Pass, 2018. Teedia lucida Verbascum nigrum Dark Mullein. Apparently this species naturalised at Ceres, 2017. Verbascum thapsus Aaron's Rod. Alien. Locally naturalised, e.g. Hermanus roadsides. Veronica arvensis Wall Speedwell. Alien. Common Field Speedwell. Alien. Veronica persica Thyme-leaved Speedwell. Alien. Veronica serpyllifolia

Zaluzianskya, Drumstick Flowers, have flowers with 5 more or less similar lobes, the lobes often notched or forked.Zaluzianskya capensisFlowers white inside, red outside. Wild in Harold Porter botanic garden, 2017.

Zaluzianskya divaricata	Annual, flower lobes rounded, yellow with red start shaped centre,
	brown outside. Houwhoek.
Zaluzianskya gracilis	Annual. De Mond, 2018 (PGC).
Zaluzianskya muirii	Showy white flowers, red outside. Cape Agulhas 2018 (PGC).
Zaluzianskya parviflora	Annual, small flowers with deeply bifid lobes. West Coast National Park.
Zaluzianskya pusilla	Annual, petals entire, white with orange centre, and maroon outside. Day 5, and Nieuwoudtville, 2010.
Zaluzianskya villosa	'Drumstick' of white to mauve 5 lobed flowers, with deeply notched petals.
71 . 1 . 1	West Coast NP sands, locally common.
Zaluzianskya violacea	Annual, flowers with bifid lobes, mauve with yellow central patch.
	Roadsides north of Nieuwoudtville 2017.
Solanaceae	
Lycium afrum	Thorny shrub, flowers purple. West Coast National Park.
Lycium cinereum	Thorny shrub, flowers white to pale mauve. Papkuilsfontein and De Hoop.
Lycium ferocissimum	Thorny shrub with leathery leaves and white to mauve flowers. West Coast National Park.
Lycium horridum	Thorny shrub with white and purple flowers. Scattered records.
Lycium tetrandrum	Boulders and West Coast National Park.
<i>Lycium</i> sp.	Worcester Botanic Garden.
Nicotiana glauca	Shrub Tobacco. Alien. Shrub with yellow tubular flowers. Karoo 2013.
Solanum giftbergense	Prickly shrub with purple flowers. Sandvelt east of Velddrif 2011.
Solanum guineense	Mauve flowers. Nieuwoudtville wild flower reserve, where a white
	flowered form too.
Solanum linnaeanum	Spiny shrub, leaves deeply lobed, flowers purple. West Coast National Park.
Solanum nigrum	Black Nightshade. Alien.
Solanum retroflexum	Similar to <i>Solanum nigrum</i> . Leaves deeply serrate. Flowers white with purple keels. Bain's Kloof Pass 2014.
Solanum tomentosum	Prickly shrub with felted leaves and purple flowers. De Hoop.
Solanum villosum	Hairy Nightshade. Alien. Rooisand 2012.
Solanum sp.	Rounded leaves, nodding purple flowers. West Coast NP 2014.
I	
Stilbaceae	
Trees or shrubs, often ericoid. Inflorescence	e a spike or axillary clusters. Flowers small, often pink, cream or white.
Funnel shaped or tubular. Sepals and petals	5. Ovary superior.
Retzia capensis	Shrublet with long narrow leaves and tubular orange flowers with black
	tips. In flower at Fernkloof.
Stilbe ericoides	Ericoid shrublet. Multi-stemmed. Whorls of 4 leaves. Globular spikes of
	pink flowers. De Hoop.
Stilbe overbergensis	Ericoid shrublet. Single-stemmed. Leaves mainly in whorls of 3. Day 12, 2010.
Tamaricaceae	
Tamarix usneoides	Day 6, 2010.
	··· <b>·</b> · · · · ·
Thymelaeaceae	
	scence a spike or head. Flowers white, yellow or pinkish, tubular, sepals 4 or
5, petals replaced by 4, 8, or 12 scale-like a	

*Gnidia* are often ericoid, flowers usually in heads, usually white or yellow, membranous or fleshy petal scales in the mouth of the fused sepal tube.

Gnidia chrysophylla	Silky hairy. 4 fleshy floral scales, flowers cream. De Hoop 2018.
Gnidia juniperifolia	Floral scales membranous. Involucral leaves slightly wider than than other
	linear leaves. Flowers yellow. Kirstenbosch, Cape Point.
Gnidia leipoldtii	Flowers 2 to 6 at branch tips, cream. Papkuilsfontein and Van Rhyn's Pass.
Gnidia nana	Shrub. Floral scales fleshy, flowers lilac to purple. Day 13, 2010.
Gnidia oppositifolia	Willowy shrub, flowers pale yellow.
Gnidia pedunculata	Shrub to 50cm. Heads of yellow flowers, silky hairy. Tanqua Karoo 2014.
Gnidia penicillata	Shrublet with blue 'flowers' with four floral scales. Several at Kleinmond.
Gnidia pinifolia	Shrub. Floral scales fleshy, leaves needle-like, involucral leaves wider,

Gnidia simplex	flowers white. Cape Point and De Hoop. Shrublet. Floral scales membranous. Yellow flowers. Leaves linear- lanceolate to awl-shaped. De Hoop limestone.	
Gnidia squarrosa	Willowy shrub. Flowers pale cream-green. De Hoop.	
Gnidia tomentosa	Shrub with reddish stems. Kirstenbosch.	
Lachnaea axillaris Lachnaea densiflora	Shrublet with cream to pink flowers. Cape Agulhas 2018 (PGC). Ericoid shrub with capitula of cream to dark pink flowers. One small example at Cape Point, and several fine at Kleinmond.	

Passerina has small cream or reddish flowers.

Passerina corymbosa

Passerina ericoides

Passerina glomerata

Passerina obtusifolia

Passerina galpinii

Passerina rigida

Passerina spp.

Passerina truncata

Kirstenbosch. (*P.vulgaris*). De Hoop. De Hoop limestone. Nieuwoudtville waterfall, Pakhuis Pass. Worcester botanic garden. De Hoop dunes. Nieuwoudtville. Others probably present.

*Struthiola* has flowers solitary in upper axils, forming long spikes, usually white or cream. Fleshy petal scales 4, 8, or 12.

Struthiola argentea Struthiola ciliata	Floral scales 12. Hypanthium hairy outside. De Hoop flats 2018. Floral scales 8. Hypanthium hairy outside. Kirstenbosch, Cape Point,		
	Nieuwoudtville, Ceres, Rooisand, etc. (ssp.angustifolia at Pakhuis Pass).		
Struthiola confusa	Floral scales 8. Hypanthium hairy outside. Fernkloof.		
Struthiola dodecandra	Floral scales 8. Hypanthium glabrous outside. Rooisand.		
Struthiola myrsinites	Floral scales 8. Hypanthium glabrous outside. Greyton (PGC), Cape Point, Rooisand, etc.		
Struthiola rigida	Floral scales 12. Hypanthium glabrous outside. De Hoop flats.		
Struthiola striata	Floral scales 4. De Hoop flats.		
Struthiola tomentosa	Floral scales 12. Hypanthium hairy outside. Branches silky woolly. Fernkloof.		
Struthiola spp.	A few other species seen.		
Tropaeolaceae			
Tropaeolum majus	Nasturtium. Alien. Scattered records.		
Urticaceae			
Didymodoxa capensis	Annual with green flowers. Nieuwoudtville waterfall, new in 2019.		
Droguetia iners	Softly woody perennial. Flowers greenish. In shade near rooms at De Hoop, 2018.		
Forsskaolea candida	Shrublet. Roadside north of Nieuwoudtville.		
Urtica urens	Annual Nettle. Alien.		
Valerianaceae			
Centranthus ruber	Red Valerian. Alien.		
Verbenaceae			
Chascanum cernuum	Twiggy shrublet, terminal spikes of white, or mauve-tinged, flowers with a yellow throat. De Hoop, common at the burn site. ( <i>Plexipus cernuus</i> )		
Violaceae			
Viola arvensis	Apparently this alien at De Hoop 2013. Not in Cape Plants.		
Viscaceae (Included in Santalaceae	e in PGCFR)		
Viscum capense	Parasitic on Osteospermum, Eulclea, Maytenus, and Pterocelstrus. West		
*	Coast NP, Waylands, and De Hoop dunes.		
Viscum pauciflorum	Orange berries. Parasitic on <i>Maytenus</i> , <i>Euclea</i> , and <i>Searsia</i> . Very many or <i>Maytenus</i> at Kirstenbosch.		

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Viscum rotundifolium	Common on Acacia karoo.	
Viscum spp.	On Agathosma imbricata, De Hoop and Phylica ericoides, De Hoop. (?)	
Zygophyllaceae		
Augea capensis	Brittle annual or perennial with opposite clavate leaves. Quiver Tree Forest 2018.	
Roepera was formerly Zygophyllum. Leav	es bifoliolate unless otherwise stated.	
Roepera cordifolia	Shrublet with simple leaves, flowers yellow with red or brown markings. West Coast National Park shore.	
Roepera flexuosa	Shrublet, yellow flowers with reddish markings. Cape Point, West Coast NP, and De Hoop flats.	
Roepera foetida	Foetid shrub. Nieuwoudtville wild flower reserve etc.	
Roepera fulva	Shrublet, sessile leaves. Fruit 5-angled.	
Roepera lichtensteiniana	Shrublet with with bifoliolate leaves and lime-yellow flowers.	
Roepera morgsana	Shrub, fleshy leaves, large fruits with 4 wings. West Coast NP, De Hoop.	
Roepera pygmaea	This at Nieuwoudtville 2019?	
Roepera retrofracta	Shrub with minute flowers, white or cream. Karoo koppie 2009.	
Roepera sessilifolia	Shrublet, flowers whitish with red veins. Houwhoek.	
Roepera spinosa	Leaves sessile. Cape Point.	
Roepera spp.	A few unidentified.	

## Systematic List Number 2

Common Ostrich Not	Struthio camelus	Cape Point, West Coast NP, De Hoop etc.
1.00		truly wild populations.
Helmeted Guineafowl	Numida meleagris	Widespread.
Grey-winged Francolin	Scleroptila africana	West Coast National Park.
Cape Spurfowl	Pternistis capensis	Widespread and common.
Common Quail	Coturnix coturnix	Heard at several sites.
White-faced Whistling Duck		Observatory and Ceres.
Spur-winged Goose	Plectropterus gambensis	Widespread, seen most days.
Egyptian Goose	Alopochen aegyptiaca	Widespread and very common.
South African Shelduck	Tadorna cana	Ceres.
Cape Teal	Anas capensis	Tienie Versveld.
Yellow-billed Duck	Anas undulata	Scattered records.
African Black Duck	Anas sparsa	Ceres.
Cape Shoveler	Anas smithii	Rooisand.
Red-billed Teal	Anas erythrorhyncha	A few records.
African Penguin	Spheniscus demersus	Many seen very closely at Boulders, and
at		
		Betty's Bay.
Great Crested Grebe	Podiceps cristatus	De Hoop.
Greater Flamingo	Phoenicopterus roseus	Near Cape Town, Berg River, West Coast
C C	•	National Park, Rooisand, etc.
Lesser Flamingo	Phoenicopterus minor	Near Cape Town, West Coast National
Park,	•	<b>•</b> •
		Veldriff, etc.
African Sacred Ibis	Threskiornis aethiopicus	Widespread and very common.
Hadada Ibis	Bostrychia hagedash	Common and widespread. Seen daily.
African Spoonbill	Platalea alba	De Hoop.
Western Cattle Egret	Bubulcus ibis	Widespread in small numbers.
Black-headed Heron	Ardea melanocephala	Widespread singletons.
Grey Heron	Ardea cinerea	A few records.
Little Egret	Egretta garzetta	De Hoop.
Great White Pelican	Pelecanus onocrotalus	Several north of Cape Town.
Reed Cormorant	Microcarbo africanus	Scattered records.
Crowned Cormorant	Microcarbo coronatus	Cape Point and Betty's Bay.
Bank Cormorant	Phalacrocorax neglectus	Betty's Bay.
White-breasted Cormorant	Phalacrocorax lucidus	Scattered records.
Cape Cormorant	Leucocarbo capensis	Widespread. Extremely numerous along
L.		West coast.
African Darter	Anhinga rufa	Scattered records.
Black-winged Kite	Elanus caeruleus	Scattered records e.g. West Coast
National		C C
		Park, Nieuwoudtville.
Black Kite	Milvus migrans	Widespread.
African Fish Eagle	Haliaeetus vocifer	Bot River. Heard at De Hoop.
Cape Vulture	Gyps coprotheres	One east of Bredasdorp.
Black Harrier	Circus maurus	West Coast NP and Nieuwoudtville.
African Harrier Hawk	Polyboroides typus	Nieuwoudtville.
Pale Chanting Goshawk	Melierax canorus	Nieuwoudtville area.
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Birds

Black Sparrowhawk

Common Buzzard Jackal Buzzard Verreaux's Eagle Booted Eagle Rock Kestrel Greater Kestrel Ludwig's Bustard

Denham's Bustard Karoo Korhaan Southern Black Korhaan Common Moorhen Red-knobbed Coot Blue Crane

Spotted Thick-knee African Oystercatcher

Black-winged Stilt Pied Avocet **Blacksmith Lapwing Crowned Lapwing** Kittlitz's Plover Three-banded Plover White-fronted Plover African Snipe Common Greenshank Hartlaub's Gull Kelp Gull Caspian Tern Swift Tern Namaqua Sandgrouse Rock Dove widespread. Speckled Pigeon African Olive Pigeon Lemon Dove Red-eyed Dove Ring-necked Dove Laughing Dove Red-chested Cuckoo Fiery-necked Nightjar Alpine Swift African Black Swift Little Swift White-rumped Swift Speckled Mousebird White-backed Mousebird **Red-faced Mousebird** 

Accipiter melanoleucus

Buteo buteo Buteo rufofuscus Aquila verreauxii Hieraaetus pennatus Falco rupicolus Falco rupicoloides Neotis ludwigii

Neotis denhami Eupodotis vigorsii Afrotis afra Gallinula chloropus Fulica cristata Anthropoides paradiseus

Burhinus capensis Haematopus moquini

Himantopus himantopusScattered records.Recurvirostra avosettaOne at PapkuilsfonteinVanellus armatusWidespread in small nuVanellus coronatusScattered records.Charadrius pecuariusWest Coast NP.Charadrius marginatusTienie Versveld.Charadrius marginatusWest Coast National P.Gallinago nigripennisDe Hoop.Tringa nebulariaWest Coast National P.Chroicocephalus hartlaubii Locally very common.Larus dominicanusDe Hoop.Hydroprogne caspiaDe Hoop.Thalasseus bergiiBoulders.Pterocles namaquaA pair at the Quiver TrColumba liviaFeral Pigeon, towns, common

Columba guinea Columba arquatrix Columba larvata Streptopelia semitorquata Streptopelia capicola Streptopelia senegalensis Cuculus solitarius Caprimulgus pectoralis Tachymarptis melba Apus barbatus Apus barbatus Apus affinis Apus caffer Colius striatus Colius colius Urocolius indicus One over the guest house in Pinelands the morning before the group arrived. Scattered records. Common on roadsides. 2 at Van Rhyn's Pass. A few at Nieuwoudtville. Scattered records. Nieuwoudtville. Many in Nieuwoudtville area, maybe 50 each day. De Hoop. Near Swellendam. Remarkably, only heard this year. Scattered records. Scattered records. Widespread and locally numerous, seen sites with some fine views. at many Betty's Bay. Boulders, Cape Point, West Coast NP, De Hoop. Scattered records. One at Papkuilsfontein, one at Rooisand. Widespread in small numbers. Scattered records. West Coast NP. Tienie Versveld. West Coast National Park. De Hoop. West Coast National Park. Common and widespread. De Hoop. Boulders. A pair at the Quiver Tree Forest. Feral Pigeon, towns, common and Widespread. Several at Kirstenbosch. Kirstenbosch. Widespread and reasonably common. Widespread. Widespread and common. Heard at Nieuwoudtville. De Hoop. Nieuwoudtville. Scattered records. Scattered records. Worcester and De Hoop. Scattered records. West Coast, Nieuwoudtville, Ceres. Nieuwoudtville and De Hoop.

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Pied Kingfisher African Hoopoe

Acacia Pied Barbet Knysna Woodpecker Cape Batis Bokmakierie Southern Tchagra Southern Boubou Common Fiscal Fork-tailed Drongo Cape Crow Pied Crow White-necked Raven Fairy Warbler

Grey Tit Cape Penduline Tit Park. Cape Clapper Lark Karoo Lark Cape Long-billed Lark Agulhas Long-billed Lark Red-capped Lark Large-billed Lark Grey-backed Sparrow-lark Cape Bulbul Sombre Greenbul Black Saw-wing **Banded Martin** Barn Swallow White-throated Swallow Pearl-breasted Swallow **Rock Martin** Greater Striped Swallow De

Grey-backed Cisticola Levaillant's Cisticola Cloud Cisticola Karoo Prinia Bar-throated Apalis Cape Grassbird Long-billed Crombec Cape White-eye Cape Sugarbird Common Starling Pied Starling Red-winged Starling Nieuwoudtville, De Ceryle rudis Upupa africana

Tricholaema leucomelas Campethera notata Batis capensis Telophorus zeylonus Tchagra tchagra Laniarius ferrugineus Lanius collaris Dicrurus adsimilis Corvus capensis Corvus albus Corvus albicollis Stenostira scita

Parus afer Anthoscopus minutus

*Mirafra apiata* Calendulauda albescens Certhilauda curvirostris Certhilauda brevirostris Calandrella cinerea *Galerida magnirostris* Eremopterix verticalis Pycnonotus capensis Andropadus importunus Psalidoprocne pristoptera Riparia cincta Hirundo rustica Hirundo albigularis Hirundo dimidiata *Ptyonoprogne fuligula* Cecropis cucullata

Cisticola subruficapilla Cisticola tinniens Cisticola textrix Prinia maculosa Apalis thoracica Sphenoeacus afer Sylvietta rufescens Zosterops capensis Promerops cafer Sturnus vulgaris Lamprotornis bicolor Onychognathus morio Rooisand. A few records, e.g. De Hoop and Nieuwoudtville. Worcester Botanic Garden. Heard at De Hoop. Cape Peninsula. Widespread in small numbers. De Hoop. Kirstenbosch and De Hoop. Widespread and common. De Hoop. Widespread. Widespread and very common. Widespread. North of Clanwilliam and Nieuwoudtville area. Postberg. Seen and heard, West Coast National

Nieuwoudtville. West Coast and north of Veldriff. Heard, West Coast National Park. De Hoop. Scattered records, e.g. Tienie Versveld. Nieuwoudtville. Nieuwoudtville. Widespread. Kirstenbosch. Robertson. Nieuwoudtville. A few records. Scattered records by watercourses. Scattered records. Widespread. Scattered records, e.g. Nieuwoudtville and

Hoop.
Scattered records.
Scattered records.
Tienie Versveld.
Widespread and common.
De Hoop.
De Hoop.
Nieuwoudtville.
Widespread, especially Cape Town area.
Kirstenbosch, Cape Point, Fernkloof.
Widespread and very common.
Widespread and very common.
Kirtsenbosch, Cape Point,

Hoop, etc.

Pale-winged Starling Onychognathus nabouroup Nieuwoudtville. Olive Thrush Turdus olivaceus Scattered records. Karoo Thrush Turdus smithii Nieuwoudtville. Cape Robin-chat Cossypha caffra Widespread and common. Karoo Scrub-robin Eryhtropygia coryphaeus West Coast NP, Nieuwoudtville, etc. African Stonechat Saxicola torquatus Scattered records, e.g. Nieuwoudtville and De Hoop. **Capped Wheatear** *Oenanthe pileata* Scattered records. Mountain Wheatear Oenanthe monticola Nieuwoudtville area etc. Sickle-winged Chat Cercomela sinuata Nieuwoudtville area. Tractrac Chat *Cercomela tractrac* Nieuwoudtville area. Familiar Chat *Cercomela familiaris* Scattered records. Ant-eating Chat Myrmecocichla formicivoraNieuwoudtville area. Fiscal Flycatcher Sigelus silens Scattered records. Orange-breasted Sunbird Anthobaphes violacea Kirstenbosch, Cape Point, Fernkloof, etc. Malachite Sunbird Nectarinia famosa Scattered records. Southern Double-collared Sunbird *Cinnyris chalybeus* Widespread and reasonably common. Greater Double-collared Sunbird Cinnyris afer Greyton (PGC). House Sparrow Passer domesticus Widespread. Cape Sparrow Widespread and common. Passer melanurus Cape Weaver Widespread and common. Ploceus capensis Southern Masked Weaver Ploceus velatus Scattered records. Southern Red Bishop Euplectes orix Widespread and common. Yellow Bishop *Euplectes capensis* Widespread. Pin-tailed Whydah Vidua macroura Houwhoek. Cape Wagtail *Motacilla capensis* Widespread. Cape Longclaw Macronyx capensis Tienie Versveld. African Pipit Anthus cinnamomeus Nieuwoudtville. Cape Canary Serinus canicollis Scattered records. Forest Canary Crithagra scotops Kirstenbosch. White-throated Canary Crithagra albogularis Nieuwoudtville. Yellow Canary Crithagra flaviventris Scattered records. Crithagra sulphurata **Brimstone Canary** Scattered records. **Black-headed Canary** Crithagra alario Nieuwoudtville. Cape Bunting Emberiza capensis Widespread.

## Systematic List Number 3 Mammals

The nomenclature and systematic order follow 'Smither's Mammals of Southern Africa. A Field Guide', edited by Peter Apps, 2000 edition.

Cape Golden Mole	Chrysochloris asiatica	Feeding trails noted.
Brant's Whistling Rat	Parotomys brantsii	At least three colonies in the Karoo, with several animals seen very closely 2009.
		2011 heard only, and sign.
		2013 two colonies Tanqua Karoo.
Vlei Rat	Otomys irroratus	Probably this at Tienie Versveld.
Striped Mouse	Rhabdomys pumilio	Diurnal. Only a dead individual this year,
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Dassie Rat		Nieuwoudtville wild flower reserve. A colony found at the Quiver Tree Forest
		in 2014, but none seen in 2017, 2018, or
2019.		
Grey Squirrel	Sciurus carolinensis	Naturalised in southwest Western Cape Province and seen in Pinelands.
Cape Molerat NP.	Georychus capensis	Mounds in sandy areas, e.g. West Coast
Cape Dune Molerat	Bathyurgus suillus	Mounds locally numerous.
Porcupine	Hystrix africaaustralis	Sign frequent, including quills, diggings, unearthed roots, and burrows at Hantam.
Cape Hare	Lepus capensis	
Scrub Hare	Lepus saxatilis	De Hoop.
Rock Hyrax	Procavia capensis	Scattered records, e.g. Boulders,
Worcester		
		Botanic Garden, Nieuwoudtville, and De Hoop.
Cape Mountain Zebra	Equus zebra zebra	Several in Postberg and at De Hoop.
Gemsbok	Oryx gazelle	3 in the Tanqua Karoo, 2017.
Red Hartebeest	Alcelaphus buselaphus	A dead animal in the Tanqua Karoo 2017.
Bontebok	Damaliscus dorcas dorcas	Postberg and De Hoop, Also Cape Point.
		Widely translocated within the species'
natural		
		range.
Common Duiker	Sylvicapra grimmia	2014 West Coast NP and Tulbagh.
Springbok	Antidorcas marsupialis	Postberg.
Klipspringer	Oreotragus oreotragus	3 near Calvinia, 2009.
Steenbok	Raphicerus campestris	West Coast NP.
Cape Grysbok	Raphicercus campestris	Near De Hoop 2018.
Grey Rhebok	Pelea capreolus	De Hoop.
Greater Kudu	Tragelaphus strepticeros	1 at Postberg, where not native, 2009 and 2011. A few there 2013.
Eland	Taurotragus oryx	West Coast NP, and De Hoop.
		Translocated populations.
Caracal	Felis caracal	1 seen superbly well at West Coast NP by
		PGC before the start of the tour, 2009.
2011		
		2 in West Coast NP. 2013 droppings at
		Nieuwoudtville waterfall.
African Wild Cat	Felis lybica	At least one, but probably two animals in
the		
		Tanqua Karoo, 2009.
Black-footed Cat	Felis nigripes	A skull of what I think is this species
found at		
		Pakhuis Pass, 2018.
Bat-eared Fox	Otocyon megalotis	3 at Nieuwoudtville, and 2 in the Tanqua
		Karoo 2009. 2011 Postberg. 2019 sign at
		Nieuwoudtville.
Cape Fox	Vulpes chama	Houwhoek before the group arrived (PC
and		
~		

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Cape Clawless Otter	Aonyx capensis	FC) 2017. 2 seen superbly, and watched for a
Striped Polecat	Ictonyx striatus	considerable time, at De Hoop in 2011. Road casualties.
Suricate (Meerkat) Hantam,	Suricata suricatta	2011 a colony near Klawer. 2012 at
		a surprising record! 2013, 2 at Hantam.
Yellow Mongoose	Cynictis penicillata	De Hoop.
Egyptian Mongoose	Herpestes ichneumon	1 near Honeywood Farm, 2009.
Small Grey Mongoose Hoop.	Galerella pulverulenta	Scattered records, e.g. West Coast, De
Chacma Baboon of	Papio cynocephalus ursin	us Few seen this year. De Hoop and south
		Nieuwoudtville.
Vervet Monkey	Cercopithecus aethiops	A troop at Grootvadersbosch, 2009, was a remarkably south-westerly record.
Aardvark into	Orycteropus afer	Much sign such as burrows, and diggings
		termite nests.
Cape Fur Seal 2018.	Arctocephalus pusillus	In the ocean at De Hoop and False Bay
Southern Right Whale few	Eubalaena australis	Perhaps 30 to 40 at De Hoop 2012, and a
		at Hermanus (2009). c.60 at De Hoop
2011.		50+ at De Hoop 2013.
		20+ at De Hoop 2014, and 3 at Betty's
Bay.		
		<ul><li>20+ at De Hoop 2017.</li><li>40+ at De Hoop, and several at Hermanus 2018.</li></ul>
		2019 only c.10 at De Hoop.
Humpback Whale record.	Megaptera novaeangliae	2 from Cape Point 2009, was a good
		Also seen there 2011. 2014, 2, and 3, from the West Coast NP.

## Systematic List Number 4 Amphibians and Reptiles

Angulate Tortoise	Chersina angulata	Rather widespread in small numbers, e.g. West Coast NP, Cape Point.
Leopard Tortoise	Stigmochelys (Geochelone) pardalis	Worcester Botanic Garden.
Parrot-beaked Tortoise	Homopus areolatus	2011 Rooisand. 2012 Ceres. 2018
Waylands.		
Cape Dwarf Chameleon	Bradypodion pumilum	One in Pinelands 2017.
Ocellated Thick-toed Gecko	Pachydactylus geitje	One at Waylands 2017.
Small-scaled Leaf-toed Gecl species on Day 7 (CM	<u> </u>	Goggia microlepidota Apparently this

photo) 2017. Greentours Natural History Holidays <u>www.greentours.co.uk</u> 80

Spiny Agama	Agama hispida	Ceres lunch site 2017.
Southern Rock Agama	Agama atra	Cape Point, Cederberg, De Hoop, etc.
Namaqua Sand Lizard	Pedioplanis namaquensis	Tanqua Karoo 2017.
Spotted Sand Lizard	Pedioplanis lineoocellata	Quiver Tree Forest.
Cape (Black) Girdled Lizard	Cordylus cordylus niger	Several at Cape Point, and West Coast
NP.		
Karoo Girdled Lizard	Cordylus polyzonus	Postberg.
Graceful Crag Lizard	Pseudocordylus capensis	Nieuwoudtville waterfall.
Cape Skink	Trachylepis capensis	A few records.
Red-sided Skink	Trachylepis homalocephale	a Harold Porter Botanic Garden 2018.
Western Rock Skink	Trachylepis sulcata	Quiver Tree Forest.
Variegated Skink	Trachylepis variegata	West Coast NP.
Silvery Dwarf Burrowing Ski	ink	Scelotes bipes Rooisand 2013.
Puff Adder	Bitis arietans	1 at Cape Point 2009. De Hoop 2011.
		Tanqua Karoo 2012. West Coast National
		Park 2014.
		2018 south of Nieuwoudtville.
Horned Adder	Bitis caudalis	A fine individual in Tanqua Karoo, 2013.
Mole Snake	Pseudaspis cana	South of Nieuwoudtville 2018.
Karoo Whip Snake	Psammophis notostictus	Quiver Tree Forest, 2013. Probably this
		Nieuwoudtville 2014.
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Spotted Skaapsteker *Psammophylax rhombeatus* De Hoop 2017. NB Several snakes seen in 2019, but all seen only briefly and none identified.

Plain Rain Frog Sand Rain Frog Cape Mountain Rain Frog Western Leopard Toad Raucous Toad Cape River Frog Kirstenbosch	Breviceps fuscus Breviceps rosei Breviceps montanus Amietophrynus pantherinus Amietophrynus rangeri Afrana fuscigula	Heard at Grootvadersbosch 2009. Heard at West Coast National Park. Heard Cape Peninsula and Kirstenbosch. Rooisand 2014. Kogelberg. 1 at Kirstenbosch 2009. Heard
		2013. Harold Porter Botanic Garden 2018. Heard Kogelberg 2019.
Striped Grass Frog	Ptychadena porosissima	Cape Point 2014.
Clicking Stream Frog	Strongylopus grayii	Pinelands.
Banded Stream Frog	Strongylopus bonaespei	Heard at Cape Point.
Cape Peninsula Moss Frog	Arthroleptella lightfooti	Heard at Kirstenbosch, also Cape Point.
De Villiers's Moss Frog	Arthroleptella villiersi	Heard at Harold Porter Botanic Garden 2018.
Cape Caco	Cacostermum capense	Heard.
Bronze Caco	Cacosternum nanum	Heard at Grootvadersbosch 2009.
Micro Frog	Microbatrachella capensis	Heard at Rooisand 2013.
Cape Sand Frog	Tomopterna delalandii	Heard at Langebaan.

## Systematic List Number 5 Butterflies

The standard work is 'Pennington's Butterflies of Southern Africa' second edition 1994, edited by Pringle et al., Much more portable is the excellent 'Field Guide to Butterflies of South Africa', by Steve Woodhall, Struik 2005. I have included foodplant (FP) details. At this time of year few

butterflies were on the wing, and more or less every individual seen was identified and is listed below.

Papilionidae Papilio demodocus Calodendrum Foeniculum	Citrus Swallowtail	<ol> <li>1 at Clanwilliam Botanic Garden 2009.</li> <li>2012, 2 in citrus groves near Clanwilliam,</li> <li>2011 also Clanwilliam.</li> <li>2019, Houwhoek and Kogelberg.</li> <li>FP: citrus, <i>Toddalia asiatica</i>,</li> <li><i>capense</i>, <i>Zanthoxyllum capense</i>,</li> <li><i>vulgare</i>, etc. etc.</li> </ol>
Pieridae		
Pieris brassicae	Large White	A few naturalised in and around CT, where first seen in 1994. (many larvae on <i>Brassica</i> at Greyton (PGC). FP: crucifers
Pontia helice	Meadow White	Scattered records. FP: <i>Heliophila</i> spp. and other crucifers.
Mylothris agathina	Common Dotted Border	2 + at Boulders 2009. 2012, Harold Porter Botanic Garden. 2014 De Hoop. 2018 and 2019 Boulders. FP: <i>Tapinanthus oleifolius</i> , <i>Ximenia</i>
caffra,		Osyris lanceolata, Colpoon compressum
etc. Colias electo	African Clouded Yellow	Nieuwoudtville. FP: <i>Medicago sativa</i> , <i>Trifolium</i> spp., <i>Vicia</i> spp., <i>Robinia pseudacacia</i>
Lycaenidae Theclinae		
Leptomyrina lara	Cape Black-eye	A few at Quiver Tree Forest, and Gannaga 2009. 2011, south of Calvinia. 2013 and 2014 Quiver Tree Forest. 2014 also
Worcester.		
		FP: Cotyledon orbiculata and Kalanchoe
Capys alphaeus	Protea Scarlet	<i>lugardii</i> 2011 Silvermine. 2012 Houwhoek. 2017 Cape Point. FP: <i>Protea</i> spp.
Cigaritis namaquus	Namaqua Bar	Several at the Quiver Tree Forest 2018. FP: Zygophyllum sp?
Phasis thero	Silver Arrowhead	<i>Babiana ringens</i> site and West Coast NP, 2017. A few records 2019. FP: <i>Rhus undulata</i> and <i>Melianthus major</i> .
<i>Phasis clavum</i> pass	Namaqua Arrowhead	A few at Nieuwoudtville waterfall, and
hass		lunch site near Calvinia, 2009. 2012, Hantam. 2019 Nieuwoudtville.

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		FP: <i>Rhus</i> spp.
Argyraspodes argyraspis	Warrior Silver-spotted Co	
reserve 2018.	1	
Poecilmitis lysander hantan	ısbergae	Calvinia, a few, 2009. Very local
endemic.		
		This taxon is not treated in Woodhall, but
is		
		in Pennington.
Aloeides thyra	Red Copper	CM photo, 2017.
		FP: Aspalathus spp.
Aloeides aranda	Aranda Copper	CM photo, 2017. FP: <i>Aspalathus</i> spp.
Aloeides damarensis	Damara Copper	Nieuwoudtville 2017.
Albeides dumarensis	Damara Copper	FP: <i>Aspalathus</i> spp.
Aloeides barklyi	Barkly's Copper	A male at the Quiver Tree Forest 2017.
Chrysoritis zonarius	Donkey Daisy Copper	Near Mamre 2019. FP: Osteospermum
	Donney Daney Copper	incanum.
Chrysoritis pyroeis	Sand-dune Opal	North of Veldriff. FP: Zygophyllum
· · · · ·	L	flexuosum and Thesium spp.
Chrysoritis chrysaor	Burnished Opal	Verloren Vlei.
		FP: Tylecodon paniculatus, Cotyledon
		orbiculata, Roepera spp., Acacia karoo,
		Searsia spp.
<b>.</b> .		
Lycaeninae Anthene butleri	Dala Haintail	North of Nieuway deville 2019
Anthene butteri	Pale Hairtail	North of Nieuwoudtville 2018. FP: <i>Kalanchoe</i> spp. and <i>Cotyledon</i> spp.
Cacyreus marshalli	Geranium Bronze	Kirstenbosch 2012. Citrusdal and Karoo
2011.	Geranium Diolize	Kirstenbosen 2012. Entustar and Karoo
2011.		2017 CM photo.
		FP: Geranium spp. and Pelargonium spp.
Cacyreus dicksoni	Dickson's Geranium Bron	ze Hantam, Nieuwoudtville, 2017. FP:
Geranium		
		spp. and <i>Pelargonium</i> spp.
Leptotes pirithous/brevident	tatus	Common Blue/Short-toothed One of
these species seen.		
T d i	Blue	Dissection necessary for positive id.
Tarucus thespis	Fynbos Blue	Cape Point (PGC) and Nieuwoudtville
		waterfall 2009. 2012 and 2013 Rooisand.
		2014 and 2018:- <i>Babiana ringens</i> site. 2019 scattered records.
		FP: <i>Phylica imberbis</i> , <i>Saxifraga</i> spp.
Lepidochrysops macgregori	McGregor's Blue	1 at Hantam 2011.
Eicochrysops messapus	Cupreous Blue	Watsonia meadow, Grootvadersbosch to
De		
		Hoop, 2009. FP: Thesium spp.
Zizeeria knysna	Sooty Blue	FP: Tribulus terrestris, Amaranthus spp.,
		Oxalis corniculata, Medicago sativa,
		Zornia spp.
Brephidium metophis	Tinktinkie Blue	Tanqua Karoo 2011. 2013 Quiver Tree
		Forest. 2014:- Worcester Botanic Garden.
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Zizula hylax	Gaika Blue	<ul> <li>2017:- Verloren Vlei.</li> <li>2018:- Quiver Tree Forest.</li> <li>2019:- scattered records.</li> <li>FP: <i>Exomis axyrioides</i>.</li> <li>Cape Town Observatory 2009. 2011</li> <li>Waylands. FP: <i>Ruellia</i> spp., <i>Justicia</i> spp., <i>Oxalis corniculata</i> etc.</li> </ul>
Nymphalidae Danainae		
Danaus chrysippus	African Monarch	Cape Town Observatory. FP:Asclepiadaceae.
Satyrinae		
Tarsocera cassina	Sand-dune Widow	Verloren Vlei. FP: Grasses.
Tarsocera cassus	Spring Widow	Possibly this at Pakhuis Pass.
Tarsocera fulvina	Karoo Widow	Gannaga Pass 2009. FP: Grasses.
Tarsocera species		Nieuwoudtville.
Melampius huebneri	Boland Brown	Widespread and rather common. FP: Grasses.
Pseudonympha trimenii	Trimen's Brown	Hantam, near Napier, etc. FP: Grasses, including <i>Merxmuellera</i>
stricta.		
Pseudonympha magus	Silver-bottom Brown	Scattered records. FP: Grasses.
Heliconiinae		
Acraea horta	Garden Acraea	2 at Kirstenbosch 2017. FP: <i>Kiggelaria africana</i> and <i>Passiflora</i> spp.
Nymphalinae		
Cynthia cardui	Painted Lady	Widespread in small numbers. Most very worn. FP: Asteraceae etc.
Charaxes pelias	Protea Emperor	Possibly this species at Harold Porter Botanic Garden 2018. FP: <i>Rafnia</i> spp., <i>Colpoon compressum</i> , <i>Hypocalyptus</i> <i>sophoroides</i> .
Hesperiidae Spialia diomus ferax Spilia sp. Metisella metis	Common Sandman sandman species Gold Spotted Sylph	Recorded 2014. FP: <i>Hermannia</i> spp. etc. At light, De Lande. 2018. Pinelands, 2009. 2012 and 2013, Cape Town Observatory. 2019 Boulders. FP: Grasses.