

http://dx.doi.org/10.5751/ES-04537-170226

Research, part of a Special Feature on Urban ecological and social-ecological research in the City of Cape Town

### Development of a Compendium of Local, Wild-Harvested Species Used in the Informal Economy Trade, Cape Town, South Africa

L. M. Petersen<sup>1,2</sup>, E. J. Moll<sup>3</sup>, R. Collins<sup>4</sup>, and <u>Marc T. Hockings<sup>5</sup></u>

ABSTRACT. Wild harvesting has taken place over millennia in Africa. However urbanization and cash economies have effectively altered harvesting from being cultural, traditional, and subsistence activities that are part of a rural norm, to being a subculture of commonly illicit activities located primarily within the urban, cash-based, informal economy. This paper focuses on Cape Town, South Africa where high levels of poverty and extensive population growth have led to a rapidly growing informal industry based on the cultural, subsistence, and entrepreneurial harvesting and consumption of products obtained from the local natural environment. Through a process of literature reviews, database analysis, and key informant interviews, a compendium of harvested species was developed, illustrating the breadth of illicit harvesting of products from nature reserves, public open space, and other commonage within the City. The compendium records 448 locally occurring species (198 animals and 250 plants) that are extracted for medicinal, energy, ornamental, sustenance, nursery, and other uses. The sustainability of harvesting is questionable; nearly 70% of all harvested flora and 100% of all collected fauna are either killed or reproductively harmed through the harvesting processes. Furthermore, for the 183 indigenous flora species currently recorded on the International Union for Conservation of Nature (IUCN) Red List, 28% (51) hold assessments ranging from Declining through to Critically Endangered. With respect to the more poorly assessed fauna (46 spp.), approximately 24% (11) have Declining or Threatened status.

Key Words: biodiversity; Cape Town, South Africa; cash-based economy; compendium; conservation; illicit harvesting; informal economy; urbanization; wild harvesting; wild harvest trade

#### INTRODUCTION

Despite there being a limited formal record, the procurement and trade of wild-harvested products in South Africa is believed to be considerable (Shackleton 2009). It has been established that up to 80% of South African households use herbs for medicinal and cultural purposes (Mander 1998, Shackleton 2005) and there is strong reliance on wildharvested products for household items, income generation (Shackleton and Shackleton 2004), fuelwood (Twine et al. 2003), foods (Clark et al. 2002, Shackleton 2002, UNDP 2006), and veterinary medicines (Dold and Cocks 2001). Communally managed areas that were formalized as " homelands" by the apartheid regime, and coastal zones, are among the South African landscapes where wild harvesting has traditionally taken place.

As South Africa's homelands dissolved following the democratic elections of 1994, a mass process of internal migration took place whereby impoverished residents relocated to major South African cities, in accordance with broader African urbanization trends (UN Habitat 2008). Subsequently, urban-based cash markets for traditional medicines, foods, building materials, and fuel increased. The combined trends of urbanization and cash-driven demand for natural resources brings about profound consequences for conservation and the management of biodiversity, not least of

which is, anecdotally, the growing trend of illicit wild harvesting from formally proclaimed protected areas. This may be particularly the case for Cape Town—the urban centerpiece of the unique Cape Floristic Region (CFR), which is home to >9000 flora species, of which 70% are endemic (Goldblatt and Manning 2002) and in close proximity to a conurbation of over 3.5 million people. Within the municipal area these natural habitats are represented in many protected areas (including the World Heritage Table Mountain National Park and some 23 smaller City-operated conservation reserves), catchments, parklands, commonage, beaches, and marine environments.

The purpose of the research presented in this paper was to better understand the extent of wild harvesting and its reliance on the City of Cape Town's ecological resources.

#### **Research site**

The coastal City of Cape Town (municipal area 2487 km<sup>2</sup>) is effectively bounded by the South Atlantic Ocean and the Hottentots Holland mountains. The City center is dominated by the Table Mountain range (1092 m elev.) extending southwards in a largely undeveloped peninsula forming the bulk of the Table Mountain National Park. Historically, the City has occupied the land between the foot slopes of the park and the sea, which now comprises well-established middle and upper class residential areas. Moving eastwards, the urban

<sup>&</sup>lt;sup>1</sup>University of Queensland, Australia, <sup>2</sup>Sustainable Livelihoods Foundation, South Africa, <sup>3</sup>Department of Biodiversity and Conservation Biology, University of the Western Cape, South Africa, <sup>4</sup>School of Agriculture and Food Sciences, University of Queensland, Australia, <sup>5</sup>Department of Geography, Planning and Environmental Management, University of Queensland, Australia

landscape sprawls over 50 km onto a large, sandy, low plain colloquially known as the Cape Flats; it is primarily occupied by working class residences. Cape Town's population is culturally diverse, with the main groups officially recognized as ~48% Colored (Khoi/mixed descent), ~32% Black (primarily isiXhosa affiliated), ~18% White, and ~2% Other (City of Cape Town 2009). As a legacy of the apartheid regime, these groups primarily reside geographically separately, with White South Africans generally living closer to the City center and fringing the mountains and beaches, and predominantly Black and Colored South Africans inhabiting the Cape Flats.

The City is estimated to accommodate 3.67 million people (City of Cape Town 2010) in at least 904,000 households (City of Cape Town 2005). Cape Town is a fast-growing center; between 1996 and 2007 the City grew by an average of 93,400 persons (extensive migration plus births) each year (City of Cape Town 2010). Migration is manifested in rapidly expanding informal settlements on the fringes of the Cape Flats, containing 108,899 nontitled informal dwellings, i.e., shacks (City of Cape Town 2007).

Poverty is commonplace. Over 38% of Cape Town households earned less than the Minimum Living Level for an average household of 4.7 people (US\$230 per month in 2010) (City of Cape Town 2007). Unemployment in the migrant settlement of Khayelitsha stands at approximately 54% (Department of Social Development 2007), in contrast to just over 20% for the Province (Statistics South Africa 2010). Education levels are generally low, with 58% of the adult population educated below matriculation (Grade 12) and a further 8.5% educated to Grade 5 level only (Statistics South Africa 2010).

Within the City, limited formal employment opportunities, poverty, and poor education have spawned the rise of a relatively large and expanding "cash" or informal economy. This economy is broadly characterized as "unregulated economic enterprises or activities" (Hart 1973), including "businesses that are not registered in any way . . . small in nature . . . operated from homes, street pavements and other informal arrangements" (Statistics South Africa 2010). Though historically characterized as separate, this economy displays various backward and forward linkages to South Africa's formal sector (Devey et al. 2006), although such linkages can be opaque. In this case the urban poor enter the largely informal industry of harvesting, processing, and/or trading wild-harvested products as livelihood activities to fulfill existing cultural and economic demands, and to utilize traditional knowledge and make rural linkages in an urban economy with otherwise high barriers to entry.

#### Cape Town's informal wild-harvesting industry

Relatively little has been researched or published on the local informal industry of wild harvesting within the Cape Floristic Region. Loundou (2008), in his thesis of medicinal plant trade, noted the retailing of 170 medicinal plant species within the Cape Town metropolitan area, the majority of which were harvested from the Western or Eastern Cape regions. In a related study, Nzue (2009) recorded harvest of 52 Cape Floristic Region species as medicines. Concerning the informal cut flower industry, Rebelo (1996) revealed that rare Proteaceae species were being wild harvested at low levels on the Cape Peninsula. Prominent foods harvested from Cape Floristic Region landscapes included sour figs (Carpobrotus spp.), honeybush tea (Cyclopia spp.), and buchu (Agathosma spp.) for essential oils (Cowling and Richardson 1995); however, Cowling and Richardson did not specifically describe the informal gathering and trade of these items. In a natural resource valuation study of the Cape Floristic Region, Turpie et al. (2003) estimated that the average net income from harvesting and informal trade of firewood (introduced Acacia spp.) was R148/ha/year. The informal use of marine resources has been more thoroughly investigated, in particular subsistence fisheries (Clark et al. 2002). This usage and trade are acknowledged by the South African government which, via the Marine and Coastal Management (MCM) Directorate, issues permits for subsistence harvesting of bait, shellfish, and other marine and coastal organisms. Furthermore, areas of government and academic focus are the rise of illicit harvesting of abalone (Haliotis spp.) and its export to the far east (Steinberg 2005, Hauck and Kroese 2006).

Other than sporadic research interventions that hint at the phenomenon and scale of the informal wild-harvesting industry in Cape Town, there has been no consolidated effort to record the breadth of this reliance. In the context of growing urbanization and poverty, it is likely that reliance on local biodiversity to support livelihoods is considerable. The development of a contemporary compendium of harvested species would establish a baseline for improved understanding of this activity and it would inform future conservation management actions.

#### **METHODS**

The compendium was developed through four stages that were designed to integrate data and materials from a wide variety of stakeholders and participants.

# Stage 1: developing a master list of all locally occurring biodiversity

Firstly, a master list of all recorded Cape Town biodiversity was developed using the South African National Biodiversity Institute's (SANBI) Integrated Biodiversity Information System (SIBIS). SIBIS is an internet-based platform (http:// www.sibis.sanbi.org) consisting of 1.6 million recorded flora and fauna species sightings throughout South Africa, georeferenced to exact localities (SANBI 2009). The database was publicly accessible through a map interface, allowing the authors to select broad map coordinates of the City municipal area and generate a comprehensive inventory of local species. This approach generated an initial record of more than 300,000 site entries of local species. Upon removal of duplicate records from multiple sightings, the list was greatly reduced to 4464 flora species and 1878 fauna species, thus totaling 6642 species. The list is inclusive of marine, freshwater, and terrestrial landscapes, and lists local and Cape Floristic Region endemics, South African indigenous and alien species and subspecies, and plant hybrids. Some weaknesses were noted, including an emphasis on flora, and the local extinction or emigration of various species since the time of original data collection (these are acknowledged by the SIBIS authors). Marine and littoral species were bolstered with literature from the Marine and Coastal Management Directorate. The final list was confirmed by various local ecologists and the SIBIS database manager to represent the totality of local species.

## Stage 2: compiling a provisional harvested species compendium

In a separate process, a literature review of South African subsistence and traditional utilization of wild-harvested products was conducted. From a range of peer-reviewed literature (circa 1998 to present), all recorded harvested species were documented. The harvested species from the literature were then cross-checked with the master list of species. Where harvested species were present on the master list they were extracted into a provisional harvested species compendium, by recording family, genus and species, common names, indicative anthropogenic uses, and references.

# Stage 3: ground assessment of the provisional harvested species compendium

Over the period November 2010 to April 2011, the provisional harvested species compendium was field tested in 62 semistructured interviews with conservation and lawenforcement professionals, informal economy harvesters/ processors of local species, and retailers at various points in the value/supply chain. Where interviews revealed local harvested species, they were confirmed or included in the compendium. This approach was utilized to better understand the broader system of harvesting and trade aspects (described in Bonney et al. 2007), and to allow for a variety of perspectives and inputs. Further details on participant ethnicity, product demands, and harvest trends were recorded. Participants included:

• Conservation professionals in South African national parks and the City of Cape Town. These 25 individuals were able to reveal harvesting and resource pressures within the following areas: Table Mountain National Park (terrestrial and marine sections), Edith Stephens Nature Reserve, Harmony Flats Nature Reserve, Rondevlei Nature Reserve (and encompassing False Bay Ecology Park), Macassar Dunes Nature Reserve, Tygerberg Nature Reserve, Wolfgat Nature Reserve, Atlantis Conservation Area, and the Blaauberg Conservation Area.

- Marine and terrestrial law-enforcement officers. These 11 officers were working primarily within the Table Mountain National Park and the City of Cape Town.
- Harvesters/processors of local species. The researcher accompanied 11 harvesters on collection exercises and observed processing (generally in informal markets).
- Resource retailers/users. Fifteen individuals in eight informal markets throughout the City were visited and interviewed. Ethnic, traditional healer groups (such as spiritual doctors, herbalists, and Rastafarians), cut flower traders, and ad hoc roadside vendors were interviewed, and their natural resource trading stock was examined.

To elicit accurate and reflective responses, a multiracial and culturally representative investigatory team with practical understanding of informal trade operations was trained by the lead researcher, and the team participated in all interviews. The 6-month interview and data collection process (across three seasons) allowed for temporal factors of harvest and trade, such as highly seasonal cut flower collections. Responses were further compared with law-enforcement and other official data to reflect accuracy.

#### Stage 4: finalization of the compendium

At the conclusion of field work, the locally harvested species compendium was populated and finalized. The finalization included a review of the International Union for Conservation of Nature's (IUCN) Red List status (Raimondo et al. 2009) of each harvested species, in order to support sustainability assessments and to categorize each species in terms of endemism. Where possible, references to data sources were added, although in many cases informal economy participants wished to remain anonymous.

#### RESULTS

#### Summary

The compendium records a total harvest of 454 separate species/items (flora, fauna, fungi, and inert) from within the City of Cape Town. Of the 454 locally collected records, 250 (55.1%) are locally occurring flora from 70 different taxonomic families (inclusive of three fungi species); 198 (43.4%) are marine, littoral, and terrestrial fauna from 17 taxonomic classes; and a further six "inert" wild-harvested items (including stones and seawater) are collected for trade. These are documented in Appendices 1 and 2. Appendix 1 lists locally harvested/traded flora (including fungi) for the informal economy, and Appendix 2 lists locally collected/ traded fauna. A further 121 species—reportedly wild harvested from outside the City—are imported for retail sale. For all uses, the trade of biodiversity within the City extends to 575 separate items (of which 569 are biological organisms).

#### Anthropogenic uses of local, wild-harvested products

Of the 250 species of flora (and taking into account multiple uses), 129 (51.6%) are harvested from within the City boundary for medicinal purposes, 96 (38.4%) are harvested for the cut flower trade, 10 are harvested for fiber, and 4 are harvested as fuelwood. The medicinal plant trade was substantially bolstered by an additional 121 imported species (medicinal plants thus account for 67.3% of total local informal flora trade). These are sold by informal retailers as individual plant parts, or in a variety of plant component blends and prescribed mixes. This study confirms and broadens Loundou's (2008) work from 170 to 250 species of medicinal plants traded within the City. With respect to medicinal plant species, the compendium compares to other areas as follows: in the Eastern Cape where 166 plant species are regularly traded (Dold and Cocks 2002); in Mpumalanga where 176 species are harvested/traded (Botha et al. 2004), in KwaZulu Natal where up to 400 species are regularly utilized for medicinal purposes (Mander 1998); and in Gauteng where 511 species are traded (Williams et al. 2007). The informal collection of flora species for the cut flower trade is likely greater than other biomes, but the harvest of four Cape Town flora species as food sources (including Carpobrotus spp.) is substantially less than in other regions. Table 1 summarizes the ten floral families of greatest harvest impact.

**Table 1.** Relative effects of wild-harvesting on the ten most affected plant species, by flora family: summary.

| Family           | No. of species<br>harvested | Common usage                 |
|------------------|-----------------------------|------------------------------|
| Proteaceae       | 52                          | Cut flower trade             |
| Iridaceae        | 15                          | Cut flower trade / medicinal |
| Asteraceae       | 14                          | Medicinal                    |
| Lamiaceae        | 10                          | Medicinal                    |
| Poaceae          | 11                          | Fiber / nursery              |
| Restionaceae     | 9                           | Fiber                        |
| Fabaceae         | 8                           | Fiber / medicinal            |
| Scrophulariaceae | 7                           | Medicinal                    |
| Amaryllidaceae   | 7                           | Medicinal                    |
| Malvaceae        | 7                           | Medicinal                    |

Conversely, with respect to 198 harvested fauna species, 120 (60.6%) are harvested for human consumption; these are primarily marine mollusks, but included are four terrestrial mammals and potentially 16 terrestrial/wetland birds. A further 77 species (exclusively marine) are harvested for use as bait for catching food for human consumption, although 73 of these are also traded or eaten as a primary food. Fifty-six species (28.2%)—including reptiles (primarily snakes), all locally occurring butterflies, arachnids, and *Colophon* beetles —are gathered by (potentially affluent) collectors or pet traders. A further 33 species (16.7%)—primarily reptiles, including snakes and chameleons— are harvested for the purpose of medicinal use. The majority of larger mammals are

hunted for sport or gambling purposes (including "blood sports"). Table 2 highlights the relative effects of wild harvesting on animal species, by faunal class.

**Table 2.** Relative effects of wild harvesting on animal species,

 by faunal class: summary.

| Class          | No. of species<br>harvested | Common usage          |
|----------------|-----------------------------|-----------------------|
| Gastropoda     | 53                          | Bait / food           |
| Insecta        | 36                          | Collectors            |
| Reptilia       | 28                          | Medicinal / pet trade |
| Aves           | 19                          | Food                  |
| Osteichthyes   | 15                          | Food                  |
| Polyplacophora | 11                          | Bait / food           |
| Mammalia       | 10                          | Sport / food          |
| Bivalvia       | 7                           | Bait / food           |
| Pteriomorphia  | 5                           | Food                  |
| Arachnida      | 3                           | Pet trade             |
| Maxillopoda    | 3                           | Bait / food           |
| Amphibia       | 2                           | Pet trade             |
| Malacostraca   | 2                           | Bait / food           |
| Ascidiacea     | 1                           | Bait                  |
| Cephalopoda    | 1                           | Food                  |
| Crustacea      | 1                           | Bait                  |
| Polychaeta     | 1                           | Bait                  |

#### People and local, wild-harvested products

The harvesters, retailers, and users of wild-harvested species come from a variety of cultural and socioeconomic backgrounds. There are no known estimates as to their numbers, although three groups of role players are prominent.

#### Medicinal

This includes harvesters/traders of Colored and Black ethnicity who describe themselves as Rastafarians and longstanding residents with strong traditional links to Cape biodiversity. Harvesters/traders of Black (isiXhosa) ethnicity include spiritual doctors (sangomas), traditional herbalists (nyangas), faith healers, and birth attendants. Medicinal actors harvest and trade 166 species of local flora and fauna (36.7% of all locally harvested species) for personal use or sale. When taking into account product imports from outside the City, this group accounts for 50.6% of all wild-harvested species traded.

#### Utility

This group includes harvesters who are primarily Colored and Black in origin, and who are seeking resources to bolster food or income security. This group ranges from firewood gatherers and seasonal cash-driven flower and reed harvesters, to shellfish harvesters and small-scale commercial fishermen. This group harvests 239 flora and fauna species (52.6% of all harvested species) and accounts for 41.6% of local species that are traded.

#### Niche

Niche operators are the smallest group of users. They are not necessarily economically marginalized and include collectors with specialist knowledge who harvest items such as insect or nursery specimens from a personal or financial interest. Another group includes syndicated gamblers illicitly hunting herbivorous mammals with dogs in protected areas. This group is responsible for the harvest of 60 flora and fauna species from within the City (13.2% of total species count).

#### Spread of harvesting incidences in Cape Town

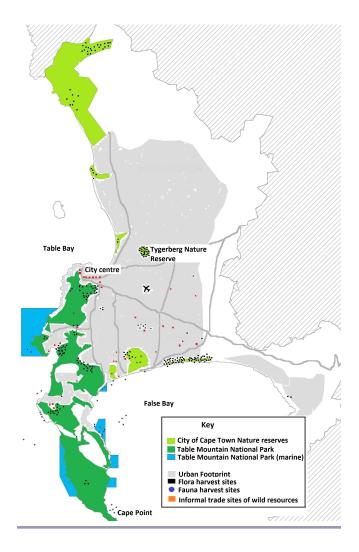
The overwhelming majority of flora and terrestrial fauna are illicitly harvested from formal protected areas within the City, with the majority of marine species either collected or fished (either permit-based or illicitly) from the intertidal zone. Although not all nature reserves and public open spaces were investigated, where the data were available the research revealed a widespread anthropogenic involvement in harvest and trade activities throughout the City. Fig. 1 is an indicative spread of these activities in key researched areas, as compiled through the field investigation and harvester information.

It is evident that harvesting incidences are spread throughout the City, with larger impacts occurring closer to the urban footprint. The clustering of harvesting incidents in formal conservation areas reflects close proximity to lower income residential areas. Whilst not exhaustive, recorded are a number of sites where wild-harvested products are retailed, the most prominent being street traders selling medicinal plants on main commercial streets. A number of informal traders of food (such as fish, sour figs) and firewood vendors were documented; these individuals are commonly positioned along roadways and traffic intersections.

#### Harvest demand

To better understand the depth of wild harvesting, lawenforcement data for the Tygerberg Nature Reserve were interrogated. These data, presented in Table 3, are based on biodiversity confiscations from illicit harvesters during office hours from April to December 2010 and they give some indication of harvester demand for biodiversity in the reserve.

In this example, the primary purpose of illicit harvesting was for medicinal use, reportedly by Rastafarian persons. Eighty percent of harvested species are killed or reproductively maimed. Research participants noted that the extremely high numbers of *Tulbaghia capensis* rhizomes confiscated are indicative of recent demand trends intersecting with harvester "discovery" of this resource within the reserve. Harvesting activity is responsive to demand trends, with consolidated lawenforcement data revealing a similar contemporary spike in medicinal harvesting of various tortoise species within a number of City reserves. **Fig. 1**. An indicative spread of biodiversity harvesting and retailing localities, based on reports by harvester and conservation manager informants, within the City of Cape Town.



#### **Sustainability of harvesting local wild species** *Harvest modalities*

Nearly all of the 250 flora species (242 or 96.8%) are harvested by hand using simple tools, i.e., spades, hand pruners (clippers), or knives. Medicinal and utility actors primarily collect on foot, storing harvested items in bags and utilizing public transport. The remaining 14 species are harvested with an axe or a saw, which are used primarily for removing bark or cutting fuelwood; these are generally transported to markets in commandeered supermarket trolleys.

| Rank | Species  | Common name                                  | Common usage                     | Harvest target                                  | Quantity confiscated (units<br>/ bunches) |
|------|--|--|----------------------------------|---|---|
| 1    | Tulbaghia capensis L.                          | Wild garlic / <i>Wilde</i><br><i>Knoffel</i> | Medicinal                        | Rhizome   | 9936                                      |
| 2    | Helichrysum patulum (L.) D. Don                | Imphepho                                     | Medicinal                        | Harvest of reproductive<br>structures / systems | 223                                       |
| 3    | Elytropappus rhinocerotis L.f.                 | Rhenoster bush /<br>Renosterbos              | Medicinal                        | Leaf and stem                                   | 192                                       |
| 4    | Chironia baccifera L.                          | Christmas berry /<br>Bitterbossie            | Medicinal                        | Harvest of reproductive<br>structures / systems | 183                                       |
| 5    | Haemanthus coccineus L.                        | March flower / rooikwas                      | Flowers / foliage /<br>medicinal | Bulb, flower                                    | 116                                       |
| 6    | <i>Drimia capensis</i> Burm. f.<br>Wijnands    | Brandui                                      | Medicinal                        | Bulb  | 61  |
| 7    | Helichrysum cymosum Sch.Bip.<br>subsp. Cymosum | Everlasting / Kooigoed                       | Medicinal                        | Harvest of reproductive<br>structures / systems | 60  |
| 8    | Arctopus echinatus L.                          | Bear foot / Kaapse<br>platdoring             | Medicinal                        | Bulb  | 44  |
| 9    | Drimia elata Jacq. ex Willd.                   | Brandui                                      | Medicinal                        | Bulb  | 23  |
| 10   | Agathosma crenulata (L.) Pillans               | Boegoe                                       | Medicinal                        | Leaves / stems<br>Total items                   | 12<br>10,850                              |

| Table 3. The ten most-commonly harvested flora species from the Tygerberg Nature Reserve (300 ha), City of Cape Town, |
|---|
| from April to December 2010, as reflected in law-enforcement confiscations (personal communication Glanville 2011).   |

A total of 119 of the 198 fauna species (60.1%) are harvested by hand or with simple tools. For intertidal mollusks, the use of paint scrapers and plastic containers was commonly described. Nets are used for the capture of up to 44 species (22.2%), including various insects and fish. Twenty-six species (13.1%) are captured with traps and/or dogs. Six species (predominantly fish) required the use of a boat in procurement.

#### Life forms targeted

Of the 250 flora species, the reproductive componentsgenerally flowers for the cut flower or medicinal plant trade -are removed for 99 species (39.6%). Bulbs, tubers, and roots are targeted for 58 species (23%) of plants, and these are used primarily for medicinal purposes. For a further 18 species (7.1%) the entire plant was targeted for the medicinal or nursery trade. In all, a total of 70% of the entire harvest of flora required the reproductive maiming, removal, or death of the plant. These findings compare to those of Dold and Cocks (2002) in the Eastern Cape, and Mander et al., (2007) in KwaZulu Natal, who noted respectively that more than 75% and 86% of harvested plant parts in their studies were associated with the death of the plant. Within this study, for a further 53 species (21%) the leaves and stems are targeted, that is, for medicinal use, fiber, and the cut flower trade. Seven tree species (2.8%) are harvested for bark that is exclusively for medicinal use; this is proportionally less than in the Eastern Cape (17%) and the KwaZulu Natal (27%) due to the limited forest habitats in the City. A further five tree species (alien to South Africa) are commonly harvested for fuelwood.

# Of the total harvest of fauna, all (100%) required the death or extraction of the animal.

#### Conservation status

With respect to the harvest of the 250 flora species, 132 (52.8%) are of Least Concern on the IUCN Red Data List. Insufficient data were available for conservation assessments for 69 species (27.6%). Of the 181 species under assessment, 49 (27.1%) are of concern.

- Six species are Declining. Five are medicinal plants; one is harvested for the nursery trade.
- Thirteen species are assessed as Near Threatened. These comprise nine species utilized for the cut flower trade, and two species each for the medicinal and nursery trades.
- Thirteen species are considered to have Vulnerable status. Of these, ten are harvested as cut flowers.
- Fourteen species have Endangered status. Of these, 13 are traded as cut flowers. A further species (*Ocotea bullata*) undergoes regular bark stripping for medicinal purposes.
- Three species are considered to be Critically Endangered. Reportedly these are harvested for the cut flower trade.

Of the 49 species recorded on the Red List, 33 incur reproductive harm from harvesting (67.3%) and 11 die (22.4%) as a result of harvesting. A further three tree taxa incur bark stripping damage for medicinal use; the cumulative impacts pose a threat to tree survival. Forty Red List species are locally indigenous (naturally occurring in Cape Town), and the remainder are indigenous to the Cape Floristic Region (not necessarily the City). Species conservation assessments for local fauna are less comprehensive. For the 198 species of animals harvested, a total of 46 (23.2%) have been assessed. Thirty five (76%) of these are of Least Concern. Eleven species (23.9%) are recorded as being of concern. Psammobates geometricus is harvested for medicinal purposes and the pet/collector trade and is considered Endangered. Similarly Endangered Colophon beetles are also used in the collector trade, as are five butterflies of conservation concern. One marine fish, Lithognathus lithognathus, is of lower risk status, and one freshwater fish, Cyprinus carpio (an alien), is considered Vulnerable within its originating habitat. Four harvested animal species are considered alien to South Africa, and one, Numida meliagris (Guinea fowl), is considered alien to Cape Town. The unassessed species are comprised mostly of harvested marine shellfish (almost all species), reptiles, and birds.

#### DISCUSSION

Our study highlights that wild harvesting has considerable spread and impact throughout the City of Cape Town. Driving this commonly illicit industry are growing numbers of resource extractors of diverse ethnic origin (anecdotally also including more affluent sectors of the local population), who benefit from low barriers to entry (>96% of flora and 60% of fauna are harvested by hand), and who consume a wide variety of species. These groups vary in their reliance on the trade of wild-harvested products, although it appears that many harvesters could be best described as small-scale, informal, commercial operators who fulfill fluctuating demands for wild-harvested products. In many cases these individuals appear to be justified by culture but motivated by cash income as they fulfill growing and diverse market demands.

The ecological sustainability of the ongoing, mainly illicit, harvest of floral species is questionable. Collectively, medicinal plants and cut flowers comprise 90% of the total flora harvest from within City conservation areas, of which >70% are either killed or reproductively maimed. The precedent for current harvesting damage to become more pronounced can be seen in re-analysis of Dold and Cocks' (2002) Eastern Cape research which noted that 3 of 34 commonly harvested species were of conservation concern. Upon re-evaluation, the same list now includes at least 11 species of concern (although the causes of their subsequent decline may vary). This research, by investigating harvesting in an urban context, has demonstrated similarly pronounced sustainability impacts within formal protected areas for species of conservation concern. Furthermore, these impacts extend to all harvested species within proximity to human settlements, and to specific individuals (such as Tulbaghia capensis) where the extent of harvesting demand is pronounced.

With respect to wild-harvested cut flowers, an historic study by Rebelo (1996) recorded 22 local Proteaceae spp. as being picked at varying levels and as being of IUCN conservation concern. The number of taxa of concern being picked has since grown to 31, as determined from, primarily, deteriorating species assessments. In light of the population growth and informal settlement growth that have occurred since Rebelo's study, and in conjunction with the potentially high reproductive damage caused by flower harvesting and the anecdotally indiscriminate utilization of species for the cut flower trade, the scope for ecological damage inflicted by illicit harvesters is of concern. A tendency for indiscriminate flower gathering was reflected in the feedback from one respondent: "My brother collects his medicines in the park, and then at the end of the day he will cut a bunch of flowers to sell for transport money to get home." Similarly, a trend of medicinal plant substitution was also encountered. In cases of shortages of a particular wild-harvested product, various harvester informants were sourcing wild substitutes. Indiscriminate harvesting and species substitution bodes poorly for conservation efforts, and presents a scenario of resource stripping from protected areas.

With respect to fauna, the subsistence harvest of marine organisms reveals lower impacts (although >75% of species await conservation assessments). A resource-rich local marine environment, an emphasis on harvesting commonplace and highly fecund mollusks, a permit-monitoring system, and relatively lax policing may contribute to the potential for improved sustainability. Of greater concern is the potential ecological damage from invertebrate and reptile harvesters extracting species for the pet, collector, and medicinal markets.

The growth of human settlement in the City is reflected in increased harvesting pressures in local conservation areas, which is most pronounced in areas adjacent to poor socioeconomic settlements. Yet, if confiscations data from the Tygerberg Nature Reserve (which is both fenced and surrounded by middle class suburbia) reflect trends in the demand for local flora and fauna, there is an urgent requirement for all conservation reserves to enhance measures to protect biodiversity.

This research highlights the imperative for creative management, and economic and enforcement solutions that address various harvester groups.

Firstly, there is a need to improve the overall understanding of the informal economy's demand for local wild-harvested species. The effort to understand the demand is ongoing in this research, through analysis of the value chains in the informal wild-harvesting economy. Understanding these trends through value chain analysis will improve scope for developing conservation programs that are culturally acceptable and economically beneficial for Cape Town's poor residents. Growing numbers of economically marginalized residents within the City, and the varied and evolving cultural dynamics, require increasingly people-centered solutions for community and conservation relevance.

Secondly, in localities where uncontrolled harvesting is known to occur, mapping community structure and form as a baseline for possible future restoration efforts should take place. Simultaneously, comprehensive reserve-level risk assessments that integrate current and new management approaches are required. Understanding and prioritizing actual and potential illicit harvesting risk and impacts at the protected area level will improve conservation management approaches. In highrisk reserves, enhanced surveillance and enforcement are essential, although 24-h enforcement is impractical for areas such as the 470 km<sup>2</sup>, open-access Table Mountain National Park. Despite potential legal and bureaucratic hurdles, further investigation of suitable permit systems for select species (as is presently utilized for various marine organisms) is required; although, according to anecdotes, permits can serve as gateways for indiscriminate resource extraction, and would not only require considerable policing but in some cases would require highly specialist biodiversity knowledge to enforce. With respect to medicinal plant and cut flower activities, the centralized control of community-based plant nurseries shows incompatibilities with the nature of informal entrepreneurship. However, in agreement with Botha, Witkowski et al. (2004) note that wholesale nurseries or cultivation efforts (ideally driven by conservation agencies) may assist in fulfilling local demands.

#### CONCLUSIONS

This paper extends the state of knowledge of flora and fauna harvesting from the City of Cape Town within the Cape Floristic Region. Our research has generated a comprehensive species inventory that will inform management decision making. It highlights the sum of wild-harvested products, of which plants and terrestrial animals in particular are commonly extracted illicitly and unsustainably. In terms of developing effective solutions (such as potential conservation/ economic development projects), there is a requirement for conservation managers to recognize the diverse biodiversity demands of the informal sector and the complex, growing, informal markets they serve. The research highlights an issue of growing prominence within the City which has incremental potential to become a major threat to future biodiversity conservation.

Responses to this article can be read online at: http://www.ecologyandsociety.org/vol17/iss2/art26/ responses/

#### Acknowledgments:

With thanks to the Sustainable Livelihoods Foundation, City of Cape Town Biodiversity Management; Mr Dalton Gibbs;

Drs Tony Rebelo, Patricia Holmes, and Andrew Charman; anonymous informal sector informants; and anonymous reviewers. This paper is a product of the Urban Ecology CityLab, which is part of the CityLab programme of the African Centre for Cities at the University of Cape Town. The African Centre for Cities' CityLab programme is funded through the Mistra Urban Futures network (which is funded by Mistra the Foundation for Strategic Environmental Research and the Swedish International Development Cooperation Agency), the Provincial Government of the Western Cape (Department of Human Settlements), and the City of Cape Town.

#### LITERATURE CITED

Bonney, L., R. Collins, A. Fearne, and R. Clarke. 2007. *Proceedings of the fifth international conference on supply chain management and information systems*, *9-12 December, Melbourne, Australia.* Presented by a consortium of Australian universities and industry associations.

Botha, J., E. T. F. Witkowski, and C. Shackleton. 2004. Market profiles and medicinal plants in the Lowveld, South Africa. *Environmental Conservation* 31(1):38-46. <u>http://dx.doi.org/1</u>0.1017/S0376892904001067

Campbell, T. A. 2006. *The effects of fire and harvesting on Restionaceae spp.* (Thamnochortus insignus *and* T. erectus) *with different life histories: a matrix modelling approach.* Dissertation. University of Stellenbosch, South Africa.

City of Cape Town. 2005. *City statistics and population census: city statistics*. Strategic Information, Strategic Development Information and GIS Department, City of Cape Town, South Africa.

City of Cape Town. 2007. *City statistics and population census: city statistics*. Strategic Information, Strategic Development Information and GIS Department, City of Cape Town, South Africa.

City of Cape Town. 2009. *State of Cape Town 2008: development issues in Cape Town*. Strategic Development Information and GIS Department, City of Cape Town, South Africa. [online] URL:

http://www.capetown.gov.za/en/stats/CityReports/Documents/ IDP/State%20of%20Cape%20Town%202008%20Final%20low% 20res.pdf.

City of Cape Town. 2010. *City of Cape Town discussion paper*, 27th August, 2010: demographics scenario. Strategic Development Information and GIS Department, City of Cape Town, South Africa. [online] URL:

http://www.capetown.gov.za/en/sdf/Documents/Nov2010/ DemographicsDiscussionPaperAugust2010.pdf.

Clark, B. M., M. Hauck, J. M. Harris, K. Salo, and E. Russell. 2002. Identification of subsistence fishers, fishing areas, resource use and activities along the South African coast. *South African Journal of Marine Science* 24(1):425-437. <u>http</u> ://dx.doi.org/10.2989/025776102784528574

Cowling, R. M., and D. M. Richardson. 1995. *Fynbos: South Africa's unique floral kingdom*. Fernwood Press, Cape Town, South Africa. <u>http://dx.doi.org/10.1016/0006-3207(91)90094-</u> <u>P</u>

Department of Social Development. 2007. *Khayelitsha: livelihood profile of Khayelitsha and situational analysis of DSD services in the node*. Government Report, Pretoria, South Africa.

Devey, R., C. Skinner, and I. Valodia. 2006. Second best? Trends and linkages in the informal economy in South Africa. Paper presented at DPRU/TIPS Conference on Accelerated and Shared Growth in South Africa: Determinants, Constraints and Opportunities, The Birchwood Hotel and Conference Centre, Johannesburg, South Africa, 18-20 October 2006. [online] URL:<u>http://www.tips.org.za/files/forum/2006/papers/</u> SecondBest Devey Skinner Valodia.pdf.

Dold, A. P., and M. L. Cocks. 2001. Traditional veterinary medicine in the Alice district of the Eastern Cape Province, South Africa. *South African Journal of Science* 97:375-379.

Dold, A. P., and M. L. Cocks. 2002. The trade in medicinal plants in the Eastern Cape Province, South Africa. *South African Journal of Science* 98:589–597.

Geertsema H. 2004. An avifauna impact study for proposed N21 (R300) Cape Town ring road toll project. City of Cape Town, South Africa. [online] URL:<u>http://www.peninsula-exp</u>ressway.org.za/draft\_docs/Avifauna.pdf.

Goldblatt, P., and J. C. Manning. 2002. Plant diversity of the Cape Region of Southern Africa. *Annals of the Missouri Botanical Garden* 89:281-302. http://dx.doi.org/10.2307/3298566

Hart, K. 1973. Informal income opportunities and urban employment in Ghana. *Journal of Modern African Studies* 11 (1):61-89. <u>http://dx.doi.org/10.1017/S0022278X00008089</u>

Hauck, M., and M. Kroese. 2006. Fisheries compliance in South Africa: A decade of challenges and reform 1994–2004. *Marine Policy* 30(1):74-83. <u>http://dx.doi.org/10.1016/j.marpo</u> 1.2005.06.007

Keirungi, J., and C. Fabricius. 2005. Selecting medicinal plants for cultivation at Nqabara on the Eastern Cape Wild Coast, South Africa. *South African Journal of Science* 101:497-501.

Lewu, F. B., and A. J. Afolayan. 2009. Ethnomedicine in South Africa: the role of weedy species. *African Journal of Biotechnology* 8(6):929-934.

Loundou, P. 2008. *Medicinal plant trade and opportunities* for sustainable management in South Africa. Dissertation. University of Stellenbosch, South Africa. Mander, M. 1998. *Marketing of indigenous medicinal plants in South Africa*. Food and Agriculture Organisation, Rome, Italy.

Mander, M., L. Ntuli, N. Diedrichs, and K. Mavundla. 2007. Chapter 13: economics of the traditional medicine trade in South Africa. Pages 189-200 *in* S. Harrison, R. Bhana, and A. Ntuli, editors. *South African health review 2007*. Health Systems Trust, Durban, South Africa. [online] URL: <u>http://w</u> ww.hst.org.za/uploads/files/chap13\_07.pdf.

Marine and Coastal Management. 2008. *Harvest permit seeker data and forms*. Department of Environmental Affairs and Tourism, Pretoria, South Africa.

Nzue, A. P. M. 2009. Use and conservation status of medicinal plants in the Cape Peninsula, Western Cape Province of South Africa. Dissertation. University of Stellenbosch, South Africa.

Raimondo, D., L. von Staden, W. Foden, J. E. Victor, N. A. Helme, R. C. Turner, D. A. Kamundi, and P. A. Manyama (editors). 2009. *Red List of South African plants*. Strelitzia 25. South African National Biodiversity Institute, Pretoria, South Africa. <u>http://dx.doi.org/10.4102/sajs.v107i5/6.653</u>

Rebelo, T. 1996. *The utilisation of proteas*. Unpublished report. Protea Atlas Project, Cape Town, South Africa.

Shackleton, C. 2009. Will the real custodian of natural resource management please stand up. *South African Journal of Science* 105:91-93.

Shackleton, C., and S. Shackleton. 2004. The *Pterocarpus* angolensis DC. based woodcraft industry in the Bushbuckridge District, South Africa. Pages 203 to 228 *in* T. Sunderland and O. Ndoye, editors. *Forest products, livelihoods and conservation.* Centre for International Forest Management, Bogor-Barat, Indonesia.

Shackleton, S. 2002. *The informal marula beer traders of Bushbuckridge, Limpopo Province, South Africa.* Internal report. Department of Environmental Science, Rhodes University, Grahamstown, South Africa.

Shackleton, S. 2005. *The significance of the local trade in natural resource products for livelihoods and poverty alleviation in South Africa.* Dissertation. Rhodes University, Grahamstown, South Africa.

South African National Biodiversity Institute (SANBI). 2005. *Plants of southern Africa: an online checklist*. Pretoria, South Africa. [online] URL: <u>http://posa.sanbi.org/intro.php</u>.

South African National Biodiversity Institute (SANBI). 2009. *SIBIS user manual*. Pretoria, South Africa. [online] URL: <u>htt</u> p://sibis.sanbi.org/resources/SIBIS\_Manual\_2009.pdf.

Statistics South Africa. 2010. *Quarterly labour force survey: quarter 1*. Pretoria, South Africa.

Steinberg, J. 2005. *The illicit abalone trade in South Africa*. Paper 105. Institute for Security Studies, Cape Town, South Africa.

Turpie, J. K., B. J. Heydenrych, and S. J. Lamberth. 2003. Economic value of terrestrial and marine biodiversity in the Cape Floristic Region: implications for defining effective and socially optimal conservation strategies. *Biological Conservation* 112:233-251. <u>http://dx.doi.org/10.1016/S0006-3207</u> (02)00398-1

Twine, W. C., D. Moshe, T. Netshiluvhi, and V. Siphugu. 2003. Consumption and direct-use values of savanna bioresources used by rural households in Mametja, a semi-arid area of Limpopo Province, South Africa. *South African Journal of Science* 99:467-473.

United Nations Development Programme (UNDP). 2006. *South Africa showcase*. Global Environment Facility, New York, New York, USA.

UN-Habitat. 2008. *The state of African cities 2008: a framework for addressing urban challenges in Africa.* United Nations Human Settlements Programme, Nairobi, Kenya.

Williams, V., E. T. F. Witkowski, and K. Balkwill. 2007. Volume and financial value of species traded in the medicinal plant markets of Gauteng, South Africa. *International Journal of Sustainable Development and World Ecology* 14:584-603. <u>http://dx.doi.org/10.1080/13504500709469757</u> Appendix 1. Compendium of locally harvested/traded flora (including fungi) within the City of Cape Town.

| Family          | Scientific Name  | Common Names<br>(English /<br>Afrikaans)                   | N | Harvest<br>target               | usage                             | Capture      | Red List<br>status | Indigenous-ness          | Source<br>locality                          | Reference   |
|-----------------|--|--|---|---------------------------------|-----------------------------------|--------------|--------------------|--------------------------|---|---|
| FABACEAE        | Acacia cyclops A.<br>Cunn. ex G. Don.                          | Rooikrans  | 1 | Timber                          | Fuel                              | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | H. Manang<br>personal<br>communicat               |
| FABACEAE        | Acacia longifolia<br>(Andr.) Willd.                            | Long leafed<br>wattle                                      | 1 | Timber /<br>leaves /<br>foliage | Fuel /<br>Fiber                   | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | SANBI (200  |
| FABACEAE        | Acacia mearnsii de<br>Wild. Syn.                               | Black wattle   | 1 | Timber /<br>leaves /<br>foliage | Fuel /<br>Fiber                   | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | SANBI (200  |
| FABACEAE        | Acacia melanoxylon <b>R.</b><br>Br.                            | Australian<br>blackwood                                    | 1 | Timber /<br>leaves /<br>foliage | Fuel /<br>Fiber                   | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | SANBI (20   |
| FABACEAE        | Acacia saligna (Labill.)<br>H.L.Wendl.                         | Port Jackson   | 1 | Timber /<br>leaves /<br>foliage | Fuel /<br>Fiber                   | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | SANBI (200<br>D. Droost<br>personal<br>communicat |
| AMARANTHACEAE   | Achyranthes aspera <b>L.</b><br>var. aspera                    | Klits  | 1 | Whole plant                     | Flowers /<br>foliage /<br>Nursery | Hand         | Not listed         | South Africa indigenous  | Cape Town -<br>general                      | Lewu an<br>Afolayan (20                           |
| APOCYNACEAE     | Acokanthera<br>oppositifolia (Lam.)<br>Codd.                   | Bushmans<br>poison   | 1 | Leaves                          | Medicine                          | Hand         | Least<br>Concern   | Locally indigenous       | Cape Town -<br>general                      | Dold and Co<br>(2001)                             |
| RUTACEAE        | Adenandra uniflora (L.)<br>Willd.                              | Anys-buchu /<br>Anysboegoe                                 | 1 | Leaves /<br>stems               | Medicine                          | Hand         | Not listed         | Locally<br>indigenous    | Cape Town -<br>general                      | Nzue (200   |
| RUTACEAE        | Adenandra villosa<br>P.J.Bergius Licht. ex<br>Roem. and Schult | China flower /<br>buchu                                    | 1 | Leaves /<br>stems               | Medicine                          | Hand         | Not listed         | Locally<br>indigenous    | Atlantis<br>Conservation<br>Area            | persona   |
| AGAPANTHACEAE   | Agapanthus africanus<br>(L.) Hoffmanns                         |  | 1 | Bulb                            | Medicine                          | Hand         | Least<br>Concern   | Locally indigenous       | Cape Town -<br>general                      | communica<br>Keirungi a<br>Fabricius (2           |
| RUTACEAE        | Agathosma crenulata<br>(L.) Pillans                            | Boegoe   | 1 | Leaves /<br>stems               | Medicine                          | Hand         | Declining          | Locally indigenous       | Cape Town -<br>general                      | H. Manan<br>persona<br>communica                  |
| HYACINTHACEAE   | Albuca sp.   |  | 3 | Bulb                            | Medicine                          | Hand         | Least<br>Concern   | Locally<br>indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manan<br>persona<br>communica                  |
| ALLIACEAE       | Allium dregeanum<br><b>Kunth.</b>                              | Wild onion /<br>Wildeui                                    | 1 | Bulb                            | Medicine                          | Hand         | Not listed         | Locally indigenous       | Cape Town -<br>general                      | Nzue (200   |
| ASPHODELACEAE   | Aloe commixta <b>A.</b><br>Berger                              |  | 1 | Whole plant                     | Nursery                           | Hand         | Vulnerable         | Locally<br>indigenous    | Cape Town -<br>general                      | Raimondo e<br>(2009)                              |
| AMARYLLIDACEAE  | Amaryllis belladonna <b>L.</b>                                 |  | 1 | Flowers                         | Flowers /<br>foliage              | Hand         | Not listed         | Locally indigenous       | Cape Town -<br>general                      | D. Gibbs<br>persona<br>communica                  |
| APONOGETONACEAE | Aponogeton distachyos<br>L. f.                                 | Cape hawthorn<br>or Cape<br>asparagus /<br>Waterblommetjie |   | Flower buds<br>and stem tips    | Food<br>source                    | Hand         | Not listed         | Locally<br>indigenous    | Cape Town -<br>general                      | Nzue (200   |
| APIACEAE        | Arctopus echinatus L.  | Bear foot /<br>Kaapse<br>platdoring                        | 1 | Bulb                            | Medicine                          | Hand         | Not listed         | Locally indigenous       | Table<br>Mountain<br>National<br>Park       | Harveste<br>informan<br>persona<br>communica      |
| POACEAE         | Aristea africana ( <b>L.</b> )<br><b>Hoffmans</b>              | Moerbos  | 1 | Whole plant                     | Medicine                          | Hand         | Not listed         | Locally indigenous       | Cape Town -<br>general                      | Nzue (200   |
| ASTERACEAE      | <i>Artemisia afra</i> var afra<br>Jacq.ex Willd                | African<br>wormwood /<br><i>Wilde-als</i>                  | 1 | Leaves /<br>stems               | Medicine                          | Hand         | Least<br>Concern   | Cape<br>indigenous       | Cape Town -<br>general                      | Nzue (200   |
| POACEAE         | Arundo donax L.  | Spanish reed   | 1 | Leaves /<br>stems               | Fiber                             | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | Harveste<br>informan<br>persona<br>communica      |
| ASPARAGACEAE    | Asparagus africanus<br>Lam.                                    |  | 1 | Rhizome                         | Medicine                          | Hand         | Least<br>Concern   | Locally indigenous       | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manan<br>persona<br>communica                  |

| ASPARAGACEAE        | Asparagus suaveolens<br>( <b>Burch.</b> ) Oberm.    | Wild asparagus /<br>Katbossie                        | 1 | Rhizome              | Medicine                        | Hand | Least<br>Concern | Cape<br>indigenous       | Cape Town -<br>general                      | Nzue (2009)  |
|---------------------|---|--|---|----------------------|---------------------------------|------|------------------|--------------------------|---|--|
| PROTEACEAE          | Aulax cancellata (L.)<br>Druce                      |  | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Least<br>Concern | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park       | Rebelo (1996)  |
| BRUNIACEAE          | Berzelia abrotanoides<br>(L.) Brongn.               | Rooibeentjies  | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Not listed       | Locally<br>indigenous    | Atlantis<br>Conservation<br>Area            | T. Abrahams<br>and C. McKie,<br>personal<br>communication                |
| BOLETACEAE          | Boletus edulis <b>Bull.</b>                         | Porcini<br>mushroom                                  | 1 | Whole<br>organism    | Food<br>source                  | Hand | Not listed       | Locally indigenous       | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communication                    |
| AMARYLLIDACEAE      | Boophone disticha (L.f.)<br>Herb.                   | Cape poison<br>bulb /<br>Kopseerblom                 | 1 | Bulb                 | Medicine                        | Hand | Declining        | Locally indigenous       | Harmony<br>Flats Nature<br>Reserve          | S. Lindane,<br>personal<br>communication                                 |
| LILIACEAE           | Bowiea volubilis<br>Harv.ex Hook.f.                 | Climbing potato<br>/ Knolklimop                      | 1 | Bulb                 | Medicine                        | Hand | Least<br>Concern | South Africa indigenous  | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communication                    |
| BUDDLEJACEAE        | Buddleja saligna <b>Willd.</b>                      | Mountain sage /<br>Salie                             | 1 | Leaves /<br>stems    | Medicine                        | Hand | Least<br>Concern | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communication                    |
| ASPHODELACEAE       | Bulbine abyssinica A.<br>Rich                       |  | 1 | Whole plant          | Medicine                        | Hand | Least<br>Concern | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communication                    |
| ASPHODELACEAE       | Bulbine frutescens (L.)<br>Willd                    | Cat's tail /<br><i>Katstert</i>                      | 1 | Leaves               | Medicine                        | Hand | Least<br>Concern | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communication                    |
| ASPHODELACEAE       | Bulbinella triquetra<br>(L.f.) Kunth                |  | 1 | Flowers /<br>fruits  | Medicine                        | Hand | Not listed       | Locally<br>indigenous    | Atlantis<br>Conservation<br>Area            | T. Abrahams<br>and C. McKie,<br>personal<br>communication                |
| RESTIONACEAE        | Calopsis paniculata<br>(Rottb.) Desv.               |  | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern | Locally<br>indigenous    | Cape Town -<br>general                      | Harvester<br>informants,<br>personal<br>communication                    |
| CANNABACEAE         | Cannabis sativa L.                                  | Marijuana /<br>Dagga                                 | 1 | Leaves /<br>stems    | Medicine                        |      | Not listed       | Alien to South<br>Africa | general                                     | Nzue (2009)  |
| RESTIONACEAE        | Cannomois virgata<br>(Rottb.) Steud                 |  | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern | Locally<br>indigenous    | Cape Town -<br>general                      | Harvester<br>informants,<br>personal<br>communication                    |
| MESEMBRYANTHEMACEAF | E Carpobrotus<br>acinaciformis (L.) L.<br>Bolus     | Sour fig /<br>Elandsvy,<br>goenavy, suurvy           | 1 | Fruit / leaves       | Food<br>source /<br>Medicine    | Hand | Least<br>Concern | Locally<br>indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserves | SANBI (2005)<br>H. Mananga,<br>personal<br>communication                 |
| MESEMBRYANTHEMACEAE | E Carpobrotus edulis (L.)<br>L. Bolus subsp. Edulis | Cape fig, Sour<br>fig / Elandsvy,<br>goenavy, suurvy | 1 | Fruit / leaves       | Food<br>source /<br>Medicine    | Hand | Least<br>Concern | Locally<br>indigenous    |   | Loundou (2008<br>H. Mananga / T<br>Abrahams<br>personal<br>communication |
| MACKINLAYACEAE      | Centella asiatica L.<br>(urban)                     |  | 1 | Leaves               | Medicine                        | Hand | Not listed       | Locally indigenous       |   | Loundou (2008  |
| IRIDACEAE           | Chasmanthe aethiopica<br>(L.) N.E.Br                | Suurkanol  | 1 | Flowers/bulb         | Flowers / medicine              | Hand | Least<br>Concern | Locally indigenous       | Cape Town -<br>general                      | D. Gibbs,<br>personal<br>communication                                   |
| IRIDACEAE           | Chasmanthe floribunda<br>(Salisb.) N.E.Br.          | Suurkanol  | 1 | Flowers/bulb         | Flowers / medicine              | Hand | Least<br>Concern | Locally indigenous       | Cape Town -<br>general                      | D. Gibbs,<br>personal<br>communication                                   |
| GENTIANACEAE        | Chironia baccifera L.                               | Christmas berry /<br>Bitterbossie                    | 1 | Flowers /<br>fruits  | Medicine                        | Hand | Least<br>Concern | Locally<br>indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga,<br>personal<br>communication                                 |

| RESTIONACEAE   | Chondropetalum<br>tectorum (L.f.) Raf.                                       | Thatch                                  | 1 | Stems                | Fiber                | Hand         | Not listed         | Locally indigenous       | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manang<br>personal<br>communicati               |
|----------------|--|---|---|----------------------|----------------------|--------------|--------------------|--------------------------|---|--|
| LAURACEAE      | Cinnamomum camphora<br>Nees and Eberm  | Camphor laurel /<br>Kamferboom          | 1 | Bark                 | Medicine             | Axe /<br>saw | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      | Harvester<br>informants<br>personal<br>communicati |
| MENISPERMACEAE | Cissampelos capensis<br>L.f.   | David root /<br>Dawidjiewortel          | 1 | Rhizome              | Medicine             | Hand         | Least<br>Concern   | Locally indigenous       | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manang<br>personal<br>communicati               |
| RUTACEAE       | <i>Clausena anisata</i><br>(Willd.) Hook f. ex<br>Benth var. anisata         |   | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | South Africa indigenous  | Cape Town -<br>general                      | Harvester<br>informants<br>personal<br>communicat  |
| ROSACEAE       | Cliffortia odorata <b>L.f.</b>   | Wild grape /<br>Wilde wingerd           | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally indigenous       | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants<br>personal<br>communicat  |
| COMMELINACEAE  | <i>Commelina africana</i> <b>L.</b><br>var. <i>Africana</i>                  |   | 1 | Rhizome              | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous    | Cape Town -<br>general                      | Lewu and<br>Afolayan (20                           |
| CRASSULACEAE   | Cotyledon orbiculata<br>var. orbiculata <b>L.</b>                            | Pig's ear /<br>Koutrei                  | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally indigenous       | Cape Town -<br>general                      | Harvester<br>informant<br>personal<br>communicat   |
| CRASSULACEAE   | Crassula dejecta <b>Jacq.</b>  |   | 1 | Leaves /<br>stems    | Medicine             | Hand         | Least<br>Concern   | Locally indigenous       | Tygerberg<br>Nature<br>Reserve              | Harveste<br>informant<br>personal<br>communica     |
| EUPHORBIACEAE  | Croton rivularis Mull.<br>Arg  | Leventelbos                             | 1 | Seeds                | Medicine             | Hand         | Least<br>Concern   | South Africa indigenous  | Cape Town -<br>general                      | Harveste<br>informant<br>personal<br>communica     |
| CORNACEAE      | Curtisia dentata<br>( <b>Burm.f.</b> )                                       | Assegaaiwood /<br>Assegaaihout          | 1 | Bark                 | Medicine             | Axe /<br>saw | Near<br>Threatened | Locally indigenous       | Table<br>Mountain<br>National<br>Park       | Nzue (200)<br>Loundou (20                          |
| CYATHEACEAE    | Cyathea capensis ( <b>L.f</b> )<br><b>Sm.</b> var. capensis                  |   | 1 | Whole plant          | Nursery              | Hand         | Declining          | Locally indigenous       | Cape Town -<br>general                      | Raimondo e<br>(2009)                               |
| FABACEAE       | Cyclopia buxifolia<br>( <b>Burm.f.</b> ) Kies                                | Honeybush tea                           | 1 | Leaves /<br>stems    | Medicine             | Hand         | Least<br>Concern   | Locally indigenous       | Cape Town -<br>general                      | Harveste<br>informant<br>persona<br>communica      |
| FABACEAE       | Cyclopia genistoides<br>(L.) R.Br.   | Honeybush tea                           | 1 | Leaves /<br>stems    | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous    | Atlantis<br>Conservation<br>Area            | T. Abraha<br>and C. Mcl<br>persona<br>communica    |
| CYPERACEAE     | Cyperus textilis <b>Thunb.</b>   | Tall star sedge                         | 1 | Flowers /<br>stems   | Fiber                | Hand         | Least<br>Concern   | Locally indigenous       | False Bay<br>Ecology<br>Park area           | D. Gibbs<br>persona<br>communica                   |
| AMARYLLIDACEAE | Cyrtanthus breviflorus<br>Harv.  | Wild crocus /<br>Vuurlelie              | 1 | Bulb                 | Medicine             | Hand         | Least<br>Concern   | South Africa indigenous  | Table<br>Mountain<br>National<br>Park       | Harveste<br>informan<br>persona<br>communica       |
| AMARYLLIDACEAE | Cyrtanthus carneus<br>Lindl.   | Wild crocus                             | 1 | Bulb                 | Medicine             | Hand         | Vulnerable         | Locally indigenous       | Table<br>Mountain<br>National<br>Park       | Harveste<br>informant<br>persona<br>communica      |
| FUMARIACEAE    | Cysticapnos vessicaria<br>(L.) Fedde   | African fumitory<br>/ <i>Klapperbos</i> | 1 | Stems                | Medicine             | Hand         | Not listed         | Locally indigenous       | Atlantis<br>Conservation<br>Area            | T. Abraha  |
| SOLANACEAE     | Datura stramonium <b>L</b> .   |   | 1 | Leaves /<br>fruits   | Medicine             | Hand         | Not listed         | Alien to South<br>Africa | Cape Town -<br>general                      |  |
| PROTEACEAE     | Diastella thymelaeoides<br>(PJ Bergius) Rourke<br>subsp. meridiana<br>Rourke | Hangklip<br>Silkypuff                   | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Vulnerable         | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park       | Rebelo (19   |

| ORCHIDACEAE    | Disa longicornu <b>L.f.</b>  |                                    | 1 | Whole plant          | Nursery /<br>Fiber              | Hand         | Vulnerable       | Locally indigenous         | Table<br>Mountain<br>National<br>Park  | Raimondo <i>et a</i><br>(2009)                                   |
|----------------|--|------------------------------------|---|----------------------|---------------------------------|--------------|------------------|----------------------------|--|--|
| SAPINDACEAE    | Dodonaea angustifolia<br>L.f.  | Sand olive /<br>Ysterhouttoppe     | 1 | Leaves /<br>stems    | Medicine                        | Hand         | Not listed       | Locally indigenous         | Table<br>Mountain<br>National<br>Park  | Nzue (2009)  |
| HYACINTHACEAE  | Drimia capensis <b>Burm.</b><br>f. Wijnands                              | Brandui                            | 1 | Bulb                 | Medicine                        | Hand         | Least<br>Concern | Locally indigenous         | Tygerberg<br>Nature<br>Reserve         | Harvester<br>informants,<br>personal<br>communicatio             |
| HYACINTHACEAE  | Drimia elata <b>Jacq. ex</b><br>Willd.                                   | Brandui                            | 1 | Bulb                 | Medicine                        | Hand         | Not listed       | Locally indigenous         | Tygerberg<br>Nature<br>Reserve         | Harvester<br>informants<br>personal<br>communication             |
| PONTEDERIACEAE | Eichornia crassipes<br><b>Kunth.</b>                                     | Water hyacinth                     | 1 | Whole plant          | Medicine                        | Hand         | Not listed       | Alien to South<br>Africa   | Edith<br>Stephens<br>Nature<br>Reserve | L. Isaacs,<br>personal<br>communicati                            |
| RESTIONACEAE   | Elegia capensis ( <b>Burm.</b><br>f) Schelpe                             |                                    | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand         | Least<br>Concern | Locally indigenous         | Cape Town -<br>general                 | Harvester<br>informants<br>personal<br>communicati               |
| RESTIONACEAE   | Elegia tectorum (L.f.)<br>Moline and H.P.Linder                          | Dekriet                            | 1 | Leaves               | Fiber                           | Hand         | Not listed       | Locally indigenous         | False Bay<br>Ecology<br>Park area      | D. Gibbs,<br>personal<br>communicati                             |
| ASTERACEAE     | Elytropappus<br>rhinocerotis <b>L.f.</b>                                 | Rhenoster bush /<br>Renosterbos    | 1 | Leaves /<br>stems    | Medicine                        | Hand         | Not listed       | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park  | Harvester<br>informants<br>personal<br>communicati               |
| ERICACEAE      | Erica curviflora <b>L.</b>   | Water heath                        | 1 | Flowers              | Flowers /<br>foliage            | Hand         | Not listed       | Locally<br>indigenous      | Cape Town -<br>general                 | Harvester<br>informants<br>personal<br>communicat                |
| ERICACEAE      | Erica plukenetii (L.)<br>subsp. plukenetii                               | Klipheide                          | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand         | Least<br>Concern | Locally indigenous         | Atlantis<br>Conservation<br>Area       | C. Dorse,<br>personal<br>communicat                              |
| ERICACEAE      | Erica plumosa <b>Thunb.</b>  |                                    | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand         | Least<br>Concern | Locally indigenous         | Atlantis<br>Conservation<br>Area       | T. Abraham<br>and C. McK<br>personal<br>communication            |
| ASTERACEAE     | Eriocephalus africanus<br>(L.) var. africanus                            | Wild rosemary /<br>Wilde roosmaryn |   | Leaves               | Medicine                        | Hand         | Least<br>Concern | Locally<br>indigenous      | Atlantis<br>Conservation<br>Area       | H. Manang<br>personal<br>communicati<br>Abrahams a<br>McKie (201 |
| RUSCACEAE      | Eriospermum<br>lanceifolium <b>Jacq.</b>                                 |                                    | 1 | Flowers /<br>fruits  | Medicine                        | Hand         | Least<br>Concern | Locally indigenous         | Cape Town -<br>general                 | Harvester<br>informants<br>personal<br>communicat                |
| MYRTACEAE      | Eucalyptus globulus<br>Labill  | Bluegum /<br>Bloekom               | 1 | Leaves               | Medicine                        | Hand         | Not listed       | Alien to South<br>Africa   | Cape Town -<br>general                 | Harvester<br>informants<br>personal<br>communicat                |
| MYRTACEAE      | Eucalyptus lehmannii<br>(Schauer) Benth                                  | Bluegum /<br>Bloekom               | 1 | Leaves               | Medicine                        | Axe /<br>saw | Not listed       | Alien to South<br>Africa   | Cape Town -<br>general                 | Harvester<br>informants<br>personal<br>communicat                |
| EBENACEAE      | <i>Euclea racemosa</i><br><b>Murray</b> subsp.<br>racemosa <b>Murray</b> | Sea guarri /<br>Seeghwarri         | 1 | Bark                 | Medicine                        | Axe /<br>saw | Least<br>Concern | Locally indigenous         | False Bay<br>Ecology<br>Park area      | D. Gibbs<br>personal<br>communicat                               |
| ORCHIDACEAE    | Eulophia speciosa<br>( <b>R.Br. Ex Lindl</b> ) Bolus                     |                                    | 1 | Flowers /<br>fruits  | Medicine                        | Hand         | Least<br>Concern | South Africa<br>indigenous | Cape Town -<br>general                 |  |
| APIACEAE       | Foeniculum vulgare<br>Mill.  | Fennel                             |   | Whole plant          | source                          | Hand         | Not listed       | Alien to South<br>Africa   |  | L. Isaacs<br>personal<br>communicat                              |
| ASTERACEAE     | Gazania pectinata<br><b>Gaertn.</b>                                      |                                    | 1 | Whole plant          | Medicine<br>/ Nursery           | Hand         | Least<br>Concern | Locally indigenous         | Table<br>Mountain<br>National          | SANBI (200<br>Harvester<br>informant                             |

|                |  |   |     |                            |                                    |      |                  |                            | Park  | personal communica                                |
|----------------|--|---|-----|----------------------------|------------------------------------|------|------------------|----------------------------|---|---|
| GERANIACEAE    | <i>Geranium incanum</i> var.<br><i>incanum</i> <b>Burm. f.</b> | Carpet geranium<br>/ Bergtee                                  |     | Flowers /<br>eaves / roots | Medicine                           | Hand | Least<br>Concern | Locally<br>indigenous      | Cape Town -<br>general                      | Harveste<br>informant<br>personal<br>communica    |
| IRIDACEAE      | Gladiolus alatus L.  | Turkey chick  | 1 I | Flowers/bulb               | Flowers /<br>foliage               | Hand | Endangered       | Locally<br>indigenous      | Atlantis<br>Conservation<br>Area            | T. Abrahan<br>and C. McH<br>personal<br>communica |
| IRIDACEAE      | Gladiolus angustus L.  | Painted lady /<br>Pypie                                       | 11  | Flowers/bulb               | Flowers /<br>foliage               | Hand | Least<br>Concern | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibbs<br>persona<br>communica                  |
| IRIDACEAE      | Gladiolus carinatus<br>Aiton                                   | Blou afrikaaner   | 11  | Flowers/bulb               | Flowers /<br>foliage               | Hand | Least<br>Concern | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                   |
| IRIDACEAE      | Gladiolus carneus <b>D.</b><br>Delaroche                       |   | 1 I | Flowers/bulb               | Flowers /<br>foliage               | Hand | Not listed       | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                   |
| IRIDACEAE      | Gladiolus cunonius (L.)<br>Gaertn.                             |   | 1 I | Flowers/bulb               | Flowers /<br>foliage               | Hand | Least<br>Concern | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                   |
| IRIDACEAE      | Gladiolus ornatus <b>Klatt</b>                                 |   | 11  | Flowers/bulb               | Flowers /<br>foliage               | Hand | Not listed       | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                   |
| GUNNERACEAE    | Gunnera perpensa <b>L.</b>                                     | River pumpkin /<br>Wilde-ramenas                              | 1   | Rhizome                    | Medicine                           | Hand | Declining        | South Africa<br>indigenous | Table<br>Mountain<br>National<br>Park       | Harvest<br>informar<br>persona<br>communica       |
| GUNNERACEAE    | Haemanthus albiflos<br>Jacq.                                   | Paintbrush /<br>Poeierkwas                                    | 11  | Bulb / flower              | Medicine                           | Hand | Least<br>Concern | South Africa indigenous    | Cape Town -<br>general                      | Harvest<br>informar<br>persona<br>communica       |
| AMARYLLIDACEAE | Haemanthus coccineus<br>L.                                     | March flower,<br>paintbrush lily, /<br>Bergajuin,<br>rooikwas |     | Bulb, flower               | Flowers /<br>foliage /<br>Medicine | Hand | Least<br>Concern | Locally<br>indigenous      | Cape Town -<br>general                      | SANBI (20<br>P. Glanvi<br>persona<br>communica    |
| AMARYLLIDACEAE | Haemanthus pubescens<br>(L.) f. subsp. pubescens               | March flower,<br>paintbrush lily, /<br>Bergajuin,<br>rooikwas |     | Bulb, flower               | Flowers /<br>foliage /<br>Medicine | Hand | Least<br>Concern | Locally<br>indigenous      | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                   |
| AMARYLLIDACEAE | Haemanthus sanguineus<br>Jacq.                                 |   | 1   | Bulb                       | Medicine                           | Hand | Least<br>Concern | Locally<br>indigenous      | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manar<br>persona<br>communic                   |
| ASTERACEAE     | Helichrysum cymosum<br>Sch.Bip. subsp.<br>cymosum              | Everlasting /<br>Kooigoed                                     | 1   | Flowers /<br>stems         | Medicine                           | Hand | Least<br>Concern | Locally<br>indigenous      | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manar<br>persona<br>communica                  |
| ASTERACEAE     | Helichrysum<br>odoratissimum (L) Less.                         | Everlasting   | 1   | Flowers /<br>stems         | Medicine                           | Hand | Least<br>Concern | Locally indigenous         | Tygerberg<br>Nature<br>Reserve              | P. Glanvi<br>persona<br>communica                 |
| ASTERACEAE     | Helichrysum spp.   | Everlasting   | 5   | Flowers /<br>stems         | Medicine                           | Hand | Not listed       | Locally indigenous         | Cape Town -<br>general                      | Harvest<br>informat<br>(2010)                     |
| MALVACEAE      | <i>Hermannia</i> spp.  |   | 7   | Flowers /<br>leaves        | Medicine                           | Hand | Not listed       | Locally indigenous         | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manar<br>persona<br>communic                   |
| POACEAE        | Hyparrhenia anamesa<br>Clayton                                 |   | 1   | Leaves                     | Flowers /<br>foliage /<br>Fiber    | Hand | Least<br>Concern | Locally<br>indigenous      | Cape Town -<br>general                      | Harvest<br>informat<br>persona<br>communic        |
| POACEAE        | Hyparrhenia dregeana<br>(Nees) Stapf ex Stent                  | Rooigrass   | 1   | Leaves                     | Flowers /<br>foliage /<br>Fiber    | Hand | Least<br>Concern | South Africa<br>indigenous | Cape Town -<br>general                      | Harvest<br>informar<br>persona<br>communic        |
| POACEAE        | Hyparrhenia filipendula<br>(Hochst) Stapf. var<br>filipendula  |   | 1   | Leaves                     | Flowers /<br>foliage /<br>Fiber    | Hand | Least<br>Concern | South Africa indigenous    | Cape Town -<br>general                      | Harvest<br>informar<br>persona                    |

| POACEAE       | Hyparrhenia filipendula<br>(Hochst) Stapf. var<br>pilosa Hochst (Stapf.) |   | 1 | Leaves                                  | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | South Africa indigenous    | Cape Town -<br>general                      | Harvester<br>informant<br>personal<br>communicat |
|---------------|--|---|---|---|---------------------------------|------|--------------------------|----------------------------|---|--|
| POACEAE       | Hyparrhenia hirta (L.)<br>Stapf.   |   | 1 | Leaves                                  | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally indigenous         | Cape Town -<br>general                      |  |
| POACEAE       | Imperata cylindrica (L)<br>Raeusch.                                      | River grass                                     | 1 | Leaves                                  | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally<br>indigenous      | Cape Town -<br>general                      | Harveste<br>informant<br>persona<br>communica    |
| CUCURBITACEAE | Kedrostis nana (Lam)   |   | 1 | Tuber                                   | Medicine                        | Hand | Not listed               | Locally indigenous         | Wolfgat<br>Nature<br>Reserve                | H. Manan<br>persona<br>communica                 |
| RANUNCULACEAE | Knowltonia bracteata<br>Harv ex. J Zahlbr.                               | Katjiedrie Blaar                                | 1 | Whole plant                             | Medicine                        | Hand | Vulnerable               | South Africa<br>indigenous | Table<br>Mountain<br>National<br>Park       | Harveste<br>informan<br>persona<br>communica     |
| RANUNCULACEAE | Knowltonia vesicatoria<br>( <b>L.f.) Sims.</b> subsp.<br>vesicatoria     | Blisterleaf /<br>Brandblaar,<br>katjiedrieblaar | 1 | Rhizome                                 | Medicine                        | Hand | Least<br>Concern         | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibbs<br>persona<br>communica                 |
| HYACINTHACEAE | Lachenalia bulbifera<br>(Cirillo) Engl.                                  | Rooinaeltjie                                    | 1 | Reproductive<br>structures /<br>systems | Flowers /<br>foliage            | Hand | Least<br>Concern         | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibb<br>persona<br>communica                  |
| RUSSULACEAE   | Lactarius deliciosus (L.<br>ex Fr.) S.F.Gray                             | Pine rings                                      | 1 |   | Food<br>source                  | Hand | Not listed               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Harveste<br>informan<br>persona<br>communica     |
| POLYPORACEAE  | Laetiporus sp.   | Hen and chicken<br>mushroom                     | 1 | Whole<br>organism                       | Food<br>source                  | Hand | Not listed               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Harveste<br>informan<br>persona<br>communica     |
| LAMIACEAE     | <i>Lavandula</i> sp.   | Lavender  | 1 | Reproductive<br>structures /<br>systems | Medicine                        | Hand | Not listed               | Alien to South<br>Africa   | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manan<br>persona<br>communica                 |
| LAMIACEAE     | Leonotis leonurus <b>R. Br.</b>  | Wild dagga                                      | 1 | Leaves                                  | Medicine                        | Hand | Least<br>Concern         | Locally<br>indigenous      | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manan<br>persona<br>communica                 |
| FABACEAE      | Lessertia frutescens (L.)<br>Goldblatt and J. C.<br>Manning.             | Cancer bush /<br>Kankerbossie                   | 1 | Leaves /<br>stems                       | Medicine                        | Hand | Least<br>Concern         | South Africa<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Manan<br>persona<br>communica                 |
| PROTEACEAE    | Leucadendron album<br>(Thunb) Fourc.                                     | Peach conebush                                  | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Least<br>Concern         | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Rebelo (19                                       |
| PROTEACEAE    | Leucadendron<br>argenteum (L.) R. Br.                                    | Silver tree                                     | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Endangered               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Rebelo (19                                       |
| PROTEACEAE    | Leucadendron<br>corymbosum <b>P.J.</b><br>Bergius                        | Swartveld conebush                              | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Vulnerable               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Rebelo (19                                       |
| PROTEACEAE    | Leucadendron<br>daphnoides ( <b>Thunb.</b> )<br><b>Meisn.</b>            | Giant pompom                                    | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Endangered               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Rebelo (19                                       |
| PROTEACEAE    | Leucadendron discolor<br>E. Phillips and Hutch                           | Flame goldtips                                  | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Endangered               | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Rebelo (19                                       |
| PROTEACEAE    | Leucadendron floridum<br><b>R. Br.</b>                                   | Flats conebush /<br>Tolbos                      | 1 | Flowers /<br>foliage                    | Flowers /<br>foliage            | Hand | Critically<br>Endangered | Locally indigenous         | Table<br>Mountain<br>National<br>Park       | Raimondo a<br>(2009)                             |

| PROTEACEAE | Leucadendron galpinii<br>E. Phillips and Hutch  | Silver cone<br>conebush                     | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Vulnerable               | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
|------------|---|---|--------|----------------------|----------------------|------|--------------------------|-----------------------|---------------------------------------|--|
| PROTEACEAE | Leucadendron gydoense<br>I. Williams  | Gydo conebush                               | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Endangered               | Cape<br>indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron laxum <b>I.</b><br>Williams  | Bredasdorp<br>conebush                      | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Endangered               | Cape<br>indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron levisanus<br>(L.) P.J. Bergius   | Cape flats conebush                         | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Critically<br>Endangered | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron linifolium<br>(Jacq.) R. Br.   | Line leaf<br>conebush                       | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Vulnerable               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Raimondo et al<br>(2009),<br>Harvester<br>informants,<br>personal<br>communication |
| PROTEACEAE | Leucadendron<br>platyspermum <b>R. Br</b>   | Flat seed conebush                          | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Vulnerable               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron rubrum<br><b>Burm. F</b>   | Tolbos                                      | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron<br>spissifolium (Salisb. Ex<br>Knight) I. Williams<br>subsp. spissifolium                      |   | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron<br>spissifolium (Salisb. Ex<br>Knight) I. Williams<br>subsp. phillipsii (Hutch)<br>I. Williams | Spear-leaf<br>Conebush /<br>Kareedouwvlakte | 1<br>e | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucadendron<br>strobilinum (L.) Druce  | Peninsula<br>conebush                       | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Near<br>Threatened       | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE | Leucadendron<br>xanthoconus (Kuntze)<br>K. Schum.   | Glossy leaf<br>conebush                     | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucospermum<br>conocarpodendron ( <b>L.</b> )<br><b>H. Buek</b> subsp.<br>conocarpodendron                 | Grey tree<br>pincushion                     | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Endangered               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucospermum<br>conocarpodendron (L.)<br>H. Buek subsp. viridum<br>Rourke                                   | Pincushion                                  | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Near<br>Threatened       | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucospermum<br>grandiflorum ( <b>Salisb.</b> )<br><b>R. Br.</b>  | Rainbow pincushion                          | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Endangered               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucospermum<br>heterophyllum ( <b>Thunb.</b> )<br><b>Rourke</b>  | Snakebush                                   | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Endangered               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |
| PROTEACEAE | Leucospermum<br>hypophyllocarpodendron<br>(L.) Druce subsp.<br>hypophyllocarpodendron                       |   | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Vulnerable               | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Raimondo <i>et al</i><br>(2009)  |
| PROTEACEAE | Leucospermum<br>oleifolium (P.J. Bergius)<br>R. Br.   | Flame<br>pincushion                         | 1      | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996)  |

| PROTEACEAE       | <i>Leucospermum reflexum</i><br><b>H. Buek ex Meisn</b> var.<br><i>reflexum</i> | Perdekoppe  | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Near<br>Threatened | Locally indigenous    | Table<br>Mountain<br>National<br>Park       | Rebelo (1996)   |
|------------------|---|---|---|----------------------|----------------------|--------------|--------------------|-----------------------|---|---|
| PROTEACEAE       | Leucospermum vestitum<br>(Lam.) Rourke  | Silky hair<br>pincushion                                    | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Near<br>Threatened | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Rebelo (1996)   |
| BORAGINACEAE     | Lobostemon fruticosus<br>(L.) H. Buek. English                                  | Eight-day<br>healing bush /<br>Agdaegeneesbos               | 4 | Leaves /<br>stems    | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communication |
| SOLANACEAE       | Lycium ferocissimum<br><b>Miers</b>   | Slangbossie   | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga,<br>personal<br>communicatio                               |
| MELIANTHACEAE    | Melianthus major L.   | Honey flower /<br>Kruidjie-<br>roer-my- nie                 | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communicatio  |
| LAMIACEAE        | <i>Mentha longifolia</i> (L.)<br>Huds. subsp. <i>capensis</i><br>(Thunb).       | Wild mint /<br>Kruisement                                   | 1 | Leaves /<br>stems    | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Harvester<br>informants,<br>personal<br>communicatio                  |
| MYRICACEAE       | <i>Metalasia</i> sp   | Blombos   | 3 | Flowers /<br>stems   | Medicine             | Hand         | Not listed         | Locally<br>indigenous | Cape Town -<br>general                      | Harvester<br>informants,<br>personal<br>communicatio                  |
| SCROPHULARIACEAE | Microdon capitatus<br>(Levyns)  | Knopbos /<br>Levyns   | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Not listed         | Locally<br>indigenous | Atlantis<br>Conservation<br>Area            | T. Abrahams<br>and C. McKie<br>personal<br>communicatio               |
| PROTEACEAE       | Mimetes hirtus (L.)<br>Salisb. Ex Knight  | Pineapple bush  | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Vulnerable         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Rebelo (1996  |
| IRIDACEAE        | <i>Moraea fugax</i> ( <b>Jacq.</b> )<br>subsp. <i>fugax</i>                     | Bobiaanuintjie  | 1 | Flowers/bulb         | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally indigenous    | Cape Town -<br>general                      | D. Gibbs,<br>personal<br>communicatio                                 |
| IRIDACEAE        | Moraea villosa (Ker<br>Gawl.) Ker Gaw   | Peacock moraea  | 1 | Bulb                 | Medicine             | Hand         | Near<br>Threatened | Locally<br>indigenous | Atlantis<br>Conservation<br>Area            | T. Abrahams<br>and C. McKie<br>personal<br>communicatio               |
| MYRICACEAE       | Morella cordifolia (L.)<br>Killick  |   | 1 | Fruit                | Food<br>source       | Hand         | Least<br>Concern   | Locally<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communicatio  |
| LAMIACEAE        | Ocimum spp.   | Thyme / <i>Timie</i>  | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park       | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communicatio  |
| LAURACEAE        | Ocotea bullata ( <b>Burch.</b> )<br>Baill.                                      | Black stinkwood<br>/ Stinkhout                              | 1 | Bark                 | Medicine             | Axe /<br>saw | Endangered         | Locally<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga,<br>personal<br>communicatio                               |
| OLEACEAE         | Olea europaea L. subsp.<br>africana (Mill) P.S.<br>Green                        | Wild olive /<br>Olienhout                                   | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga<br>personal<br>communicatio                                |
| ASTERACEAE       | Oncosiphon<br>suffruticosum (L.)<br>Kallersjo                                   |   | 1 | Leaves               | Medicine             | Hand         | Least<br>Concern   | Locally<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga<br>personal<br>communicatio                                |
| LILIACEAE        | Ornithogalum thyrsoides<br>Jacq.  | Wonder-flower,<br>star-of-<br>Bethlehem,<br>chincherinchee; | 1 | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Not listed         | Locally<br>indigenous | Atlantis                                    | T. Abrahams<br>and C. McKie<br>personal<br>communicatio               |

| OXALIDACEAE   | Oxalis pes-caprae <b>L.</b> var<br>pes-caprae                              | Wood sorrel                   | 1   | Bulbs   | Food<br>source        | Hand         | Least<br>Concern | Locally indigenous         | False Bay<br>Ecology<br>Park area     | D. Gibbs,<br>personal<br>communicati                                      |
|---------------|--|-------------------------------|-----|---|-----------------------|--------------|------------------|----------------------------|---------------------------------------|---|
| PROTEACEAE    | Paranomus reflexus<br>(E.Phillips and Hutch.)<br>Fourc.                    | Green scepter                 | 1   | Flowers /<br>foliage                                  | Flowers /<br>foliage  | Hand         | Endangered       | Locally indigenous         | Table<br>Mountain<br>National<br>Park | Rebelo (199   |
| GERANIACEAE   | Pelargonium ellaphieae<br><b>E.M. Marais</b>                               |                               | 1   | Whole plant   | Nursery               | Hand         | Endangered       | Locally indigenous         | Cape Town -<br>general                | Raimondo et<br>(2009)   |
| GERANIACEAE   | Pelargonium leptum L.<br>Bolus   |                               | 1   | Whole plant   | Medicine              | Hand         | Vulnerable       | Locally indigenous         | Cape Town -<br>general                | Raimondo et<br>(2009)   |
| GERANIACEAE   | Pelargonium lobatum<br>( <b>Burm. F.</b> ) L'Her'                          | Malva / elephant<br>foot      | 1   | Tuber   | Medicine              | Hand         | Least<br>Concern | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Nzue (2009<br>Harvester<br>informant<br>personal<br>communicat            |
| GERANIACEAE   | Pelargonium triste (L.)<br>L'Hér.  | Sand geranium /<br>Kaneelbol  | 1   | Tuber   | Medicine              | Hand         | Least<br>Concern | Locally<br>indigenous      | False Bay<br>Ecology<br>Park area     | Raimondo et<br>(2009), D<br>Gibbs, perso<br>communicat                    |
| POACEAE       | Pennisetum<br>clandestinum (Hocst ex<br>Chiov)                             | Kikuyu                        | 1   | Harvest of<br>reproductive<br>structures /<br>systems |                       | Hand         | Not listed       | Alien to South<br>Africa   | Cape Town -<br>general                | Nzue (200<br>Harveste<br>informant<br>personal<br>communica               |
| APIACEAE      | Peucedanum galbanum<br>(L.) Drude  | Blister bush /<br>Bergseldery | 1   | Leaves /<br>stems                                     | Medicine              | Hand         | Least<br>Concern | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Dold and Co<br>(2001),<br>Harveste<br>informant<br>personal<br>communicat |
| POACEAE       | Phragmites australis<br>(Cav.) Steud.                                      | Common reed                   | 1   | Leaves  | Fiber                 | Hand         | Least<br>Concern | Locally indigenous         | Cape Town -<br>general                | Harveste<br>informant<br>personal<br>communica                            |
| ERICACEAE     | Phylica ericoides L.   | Heath phylica                 | 1   | Flowers   | Flowers /<br>foliage  | Hand         | Not listed       | Locally<br>indigenous      | Cape Town -<br>general                | Harveste<br>informant<br>personal<br>communica                            |
| PINACEAE      | Pinus elliotii <b>Engelm.</b>  | Slash pine                    | 1   | Bark  | Nursery               | Axe /<br>saw | Not listed       | Alien to South<br>Africa   | Cape Town -<br>general                | D. Gibbs<br>persona<br>communica  |
| ASTERACEAE    | Plecostachys<br>serpyllifolia (P.J.<br>Bergius) Hilliard and<br>B.L. Burtt | Koeigoed                      | 1   | Leaves  | Medicine              | Hand         | Not listed       | Locally<br>indigenous      | False Bay<br>Ecology<br>Park area     | D. Gibbs<br>persona<br>communica  |
| PODOCARPACEAE | Podocarpus latifolius<br>( <b>Thunb.) R Br. Ex</b><br>Mirb.                |                               | 1   | Leaves  | Medicine              | Hand         | Least<br>Concern | Locally indigenous         | Table<br>Mountain<br>National<br>Park | Harveste<br>informan<br>persona<br>communica                              |
| POLYGALACEAE  | Polygala fruticosa <b>P.J.</b><br>Berguis                                  | Slangwortel                   | 1   | Leaves /<br>stems                                     | Medicine<br>/ Nursery | Hand         | Least<br>Concern | Locally<br>indigenous      | Cape Town -<br>general                | Dold and C<br>(2002),<br>Harveste<br>informant<br>personal<br>communica   |
| POLYGALACEAE  | Polygala serpentaria<br>Eckl. and Zeyh.                                    | Slangwortel                   | 1   | Rhizome   | Medicine              | Hand         | Not listed       | South Africa<br>indigenous |                                       | Raimondo e<br>(2009)  |
| PROTEACEAE    | Protea acaulos (L.)<br>Reichard.   | Common ground<br>sugarbush    | 1   | Flowers /<br>foliage                                  | Flowers /<br>foliage  | Hand         | Least<br>Concern | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Rebelo (19  |
| PROTEACEAE    | Protea aurea ( <b>Burm. f</b> )<br>subsp. aurea                            | Christmas candle<br>protea    | : 1 | Flowers /<br>foliage                                  | Flowers /<br>foliage  | Hand         | Least<br>Concern | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Rebelo (19  |
| PROTEACEAE    | Protea burchelli <b>Stapf</b> ,<br>(L).                                    | Burchells protea              | 1   | Flowers /<br>foliage                                  | Flowers /<br>foliage  | Hand         | Not listed       | Locally indigenous         | Atlantis<br>Conservation<br>Area      | T. Abraha<br>and C. Mcl<br>persona<br>communica                           |

| PROTEACEAE    | Protea compacta R. Br.                  | Pink protea 1                                       | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Not listed         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
|---------------|---|---|----------------------|----------------------|--------------|--------------------|-----------------------|---------------------------------------|--|
| PROTEACEAE    | Protea coronata Lam.                    | Green sugarbush 1                                   | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Not listed         | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea cynaroides (L.)                  | King protea 1                                       | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea effusa E. Mey. ex<br>Meisn.      | Marloth's 1<br>sugarbush                            | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Near<br>Threatened | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea grandiceps<br><b>Tratt.</b>      | Coral coloured 1<br>protea                          | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Near<br>Threatened | Locally indigenous    | Cape Town -<br>general                | Raimondo et a<br>(2009)  |
| PROTEACEAE    | Protea lacticolor Salisb.               | Hottentott 1<br>sugarbush                           | Ų                    | Flowers /<br>foliage | Hand         | Endangered         | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea laurifolia<br><b>Thunb.</b>      | Pastel protea 1                                     | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea magnifica <b>Link</b>            | Queen protea 1                                      | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea neriifolia <b>R. Br.</b>         | Blackbeard 1<br>sugarbush                           | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea nitida <b>Mill.</b>              | Cape wagon tree 1<br>/ Waboom                       | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea pudens <b>Rourke</b>             | Creeping protea 1                                   | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Endangered         | Cape<br>indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea punctata <b>Meisn.</b>           | Water sugarbush 1                                   | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea repens L.                        | Cape sugarbush 1                                    | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| PROTEACEAE    | Protea scolymocephala<br>(L.) Reichard  | Thistle protea, 1<br>thistle sugarbush<br>/ Skollie | Flowers              | Flowers /<br>foliage | Hand         | Not listed         | Locally<br>indigenous | Atlantis<br>Conservation<br>Area      | T. Abrahams<br>and C. McKi<br>personal<br>communicatio                           |
| PROTEACEAE    | Protea subvestita N. E.<br>Br.          | 1   | Flowers /<br>foliage | Flowers /<br>foliage | Hand         | Vulnerable         | Cape<br>indigenous    | Table<br>Mountain<br>National<br>Park | Rebelo (1996   |
| CELASTRACEAE  | Pterocelastrus rostratus (Thunb.) Walp. | 1   | Bark                 | Medicine             | Axe /<br>saw | Declining          | Locally indigenous    | Cape Town -<br>general                | Nzue (2009)  |
| RANUNCULACEAE | Ranunculus multifidus<br>Forssk.        | Brandblare 1  | Rhizome              | Medicine             |              | Least<br>Concern   | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Nzue (2009)<br>Harvester<br>informants,<br>personal<br>communicatio              |
| MYRSINACEAE   | Rapanea melanophloeos<br>(L.) Mez.      | Cape beech / 1<br>Kaapse<br>boekenhout              | Bark                 | Medicine             | Axe /<br>saw | Declining          | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Dold and Coc<br>(2002),<br>Harvester<br>informants,<br>personal<br>communication |

| VITACEAE         | Rhoicissus tomentosa<br>Lam. Wild and<br>Drummond          | Wild forest grape<br>/ Bobbejaantou | : 1 | Tuber                | Medicine             | Hand | Least<br>Concern   | South Africa indigenous    | Cape Town -<br>general                      | Harvester<br>informants,<br>personal<br>communicatior                              |
|------------------|--|-------------------------------------|-----|----------------------|----------------------|------|--------------------|----------------------------|---|--|
| LAMIACEAE        | Rosmarinus officinalis<br>L.                               | Rosmaryn                            | 1   | Flowers /<br>leaves  | Medicine             | Hand | Not listed         | Alien to South<br>Africa   | Cape Town -<br>general                      | Dold and Cock<br>(2002),<br>Harvester<br>informants,<br>personal<br>communication  |
| POLYGONACEAE     | Rumex steudelii <b>Hochst.</b><br>Ex. A. Rich.             | Beestongblaar                       | 1   | Rhizome              | Medicine             | Hand | Least<br>Concern   | South Africa<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga,<br>personal<br>communication   |
| LAMIACEAE        | Salvia africana-caerulea<br>L.                             | Wild sage /<br>Wildesalie           | 2   | Flowers /<br>foliage | Medicinal            | Hand | Least<br>Concern   | Locally indigenous         | Edith<br>Stephens<br>Nature<br>Reserve      | L. Isaacs,<br>personal<br>communication  |
| LAMIACEAE        | Salvia africana-lutea <b>L.</b>                            | Brown salvia /<br>Bruinsalie        | 2   | Flowers /<br>foliage | Medicinal            | Hand | Least<br>Concern   | Locally indigenous         | Edith<br>Stephens<br>Nature<br>Reserve      | L. Isaacs,<br>personal<br>communication  |
| LAMIACEAE        | Salvia lanceolata <b>Lam.</b>                              | Sage                                | 1   | Flowers /<br>foliage | Medicinal            | Hand | Least<br>Concern   | Locally<br>indigenous      | Edith<br>Stephens<br>Nature<br>Reserve      | L. Isaacs,<br>personal<br>communication  |
| DRACAENACEAE     | Sanseviera aethopica<br>Thunb.                             | Bitter patat                        | 1   | Tuber                | Medicine             | Hand | Least<br>Concern   | South Africa<br>indigenous | Cape Town -<br>general                      | Dold and Cock<br>(2002),<br>Harvester<br>informants,<br>personal<br>communication  |
| BALANOPHORACEAE  | Sarcophyte sanguinea<br><b>Sparrm.</b> subsp.<br>sanguinea | Wolwekos                            | 1   | Tuber                | Medicine             | Hand | Least<br>Concern   | South Africa indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserves | H. Mananga,<br>personal<br>communication   |
| ORCHIDACEAE      | Satyrium carneum<br>( <b>Dryand.</b> ) Sims                | Rooikappie                          | 1   | Whole plant          | Nursery              | Hand | Near<br>Threatened | Locally<br>indigenous      | Cape Town -<br>general                      | Raimondo et al<br>(2009),<br>Harvester<br>informants,<br>personal<br>communication |
| ORCHIDACEAE      | Satyrium foliosum Sw.                                      |                                     | 1   | Whole plant          | Nursery              | Hand | Near<br>Threatened | Locally<br>indigenous      | Cape Town -<br>general                      | Raimondo et al<br>(2009),<br>Harvester<br>informants,<br>personal<br>communication |
| ORCHIDACEAE      | Satyrium striatum<br>Thunb.                                |                                     | 1   | Whole plant          | Nursery              | Hand | Not listed         | Locally<br>indigenous      | Cape Town -<br>general                      | Raimondo et al<br>(2009),<br>Harvester<br>informants,<br>personal<br>communication |
| DIPSACACEAE      | Scabiosa columbaria <b>L.</b>                              |                                     | 1   | Rhizome              | Medicine             | Hand | Least<br>Concern   | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park       | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communication              |
| CYPERACEAE       | Schoenoplectus<br>scirpoides (Schrad.)<br>Browning         | Steekbesie                          | 1   | Leaves /<br>stems    | Fiber                | Hand | Least<br>Concern   | Locally indigenous         | False Bay<br>Ecology<br>Park area           | D. Gibbs,<br>personal<br>communicatio  |
| ANACARDIACEAE    | Searsia lucida (L.) F.A.<br>Barkley forma lucida           | Rhus                                | 1   | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern   | Locally indigenous         | Cape Town -<br>general                      | C. Dorse,<br>personal<br>communication   |
| SCROPHULARIACEAE | Selago spp.  |                                     | 6   | Rhizome              | Medicine             | Hand | Least<br>Concern   | Locally<br>indigenous      | Cape Town -<br>general                      |  |
| PROTEACEAE       | Serruria acrocarpa <b>R.</b><br>Br.                        | Spinnekopbossie                     | 1   | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern   | Locally indigenous         | Table<br>Mountain                           | Rebelo (1996)  |

|               |   |  |   |                      |                                 |      |                          |                            | National<br>Park                      |  |
|---------------|---|--|---|----------------------|---------------------------------|------|--------------------------|----------------------------|---------------------------------------|--|
| PROTEACEAE    | Serruria adscendens<br>(Lam.) R.Br.                             | Kleinmond<br>spiderhead                | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Near<br>Threatened       | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Rebelo (19   |
| PROTEACEAE    | Serruria fasciflora<br>Salisb. ex Knight                        | Common pin<br>spiderhead               | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Near<br>Threatened       | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Rebelo (19   |
| PROTEACEAE    | Serruria florida<br>(Thunb.) Salisb. ex<br>Knight               | Blushing bride                         | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Critically<br>Endangered | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Rebelo (19   |
| PROTEACEAE    | Serruria nervosa <b>Meisn.</b>                                  | Blushing bride                         | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Near<br>Threatened       | Locally indigenous         | Table<br>Mountain<br>National<br>Park | Rebelo (19   |
| SOLANACEAE    | Solanum aculeastrum<br>Dun. subsp. aculeastrum                  | Goat apple /<br><i>Bitterappel</i>     | 1 | Flowers /<br>fruits  | Medicine                        | Hand | Least<br>Concern         | South Africa<br>indigenous | Table<br>Mountain<br>National<br>Park | Dold and C<br>(2002),<br>Harveste<br>informani<br>persona<br>communica |
| SOLANACEAE    | Solanum linnaeanum<br><b>Hepper and Jaeger</b>                  | Bitter apple /<br><i>Gifappel</i>      |   | Fruit / leaves       | Medicine                        | Hand | Least<br>Concern         | South Africa<br>indigenous | Table<br>Mountain<br>National<br>Park | Harveste<br>informan<br>persona<br>communica                           |
| SOLANACEAE    | Solanum sodomaeodes<br>Kuntze                                   |  | 1 | Flowers /<br>fruits  | Medicine                        | Hand | Least<br>Concern         | South Africa<br>indigenous | Cape Town -<br>general                | Harveste<br>informan<br>persona<br>communica                           |
| BRUNIACEAE    | Staavia radiata (L.)<br>Dahl                                    | Altydbossie                            | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Least<br>Concern         | Locally indigenous         | Atlantis<br>Conservation<br>Area      | C. Dorse<br>persona<br>communica                                       |
| POACEAE       | Stenotaphrum<br>secundatum ( <b>Walt.</b> )<br>Kuntze           | Buffalo grass /<br>Cape Kweek<br>grass | 1 | Whole plant          | Nursery                         | Hand | Not listed               | Locally indigenous         | False Bay<br>Ecology<br>Park area     | C. Dorse<br>persona<br>communica                                       |
| THYMELAEACEAE | Struthiola leptantha<br>Bolus                                   |  | 1 | Bark                 | Medicine                        | Hand | Not listed               | Locally<br>indigenous      | Atlantis<br>Conservation<br>Area      | T. Abraha<br>and C. Mc<br>persona<br>communica                         |
| ASTERACEAE    | Syncarpha vestita (L.)<br>B.Nord.                               | Cape snow /<br>Sewejaartjie            | 1 | Flowers /<br>foliage | Flowers /<br>foliage            | Hand | Least<br>Concern         | Locally<br>indigenous      | Table<br>Mountain<br>National<br>Park | Raimondo<br>(2009)<br>Harvesta<br>informan<br>persona<br>communica     |
| RESTIONACEAE  | Thamnochortus erectus<br>(Thunb.) Mast.                         | Dekriet /<br>Jakkalstert               | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally<br>indigenous      | Cape Town -<br>general                | Campbe<br>(2006)<br>Harveste<br>informan<br>persona<br>communica       |
| RESTIONACEAE  | Thamnochortus<br>fruticosus <b>P.J. Berguis</b>                 | Besemriet                              | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally indigenous         | Cape Town -<br>general                | S. Lindan<br>persona<br>communica                                      |
| RESTIONACEAE  | Thamnochortus insignis<br>Mast.                                 | Dekriet                                | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally<br>indigenous      | Cape Town -<br>general                | Campbe<br>(2006)<br>Harveste<br>informan<br>persona<br>communica       |
| RESTIONACEAE  | Thamnochortus<br>spicigerus ( <b>Thunb.</b> )<br><b>Spreng.</b> | Dekriet                                | 1 | Leaves               | Flowers /<br>foliage /<br>Fiber | Hand | Least<br>Concern         | Locally<br>indigenous      | Atlantis<br>Conservation<br>Area      | T. Abraha<br>and C. Mc<br>persona<br>communica                         |
| IRIDACEAE     | Tritonia sp.  | Bergkatjietee                          | 1 | Bulb                 | Medicine                        | Hand | Least<br>Concern         | Locally<br>indigenous      | Tygerberg<br>Nature                   | P. Glanvi<br>persona   |

| ALLIACE  | EAE Ti     | ılbaghia capensis <b>L.</b>                | Wild garlic /<br>Wilde Knoffel                | 1   | Rhizome              | Medicine             | Hand | Least<br>Concern | Locally indigenous    | Tygerberg<br>Nature<br>Reserve        | P. Glanville,<br>personal<br>communication                            |
|----------|------------|--|---|-----|----------------------|----------------------|------|------------------|-----------------------|---------------------------------------|---|
| UNIDENTI | IFIED U    | nidentified                                | Bitterpatat                                   | 1   | Tuber                | Medicine             | Hand | Not listed       | Locally<br>indigenous | Cape Town -<br>general                | Nzue (2009),<br>Harvester<br>informants,<br>personal<br>communication |
| VISCACE  | EAE Vi     | iscum capense <b>L. f.</b>                 | Cape mistletoe /<br>Voëlent                   | 1   | Stems                | Medicine             | Hand | Least<br>Concern | Locally<br>indigenous | Table<br>Mountain<br>National<br>Park | Nzue<br>(2009),Harvester<br>informants,<br>personal<br>communication  |
| IRIDACE  |            | atsonia meriana (L.)<br>Iill. Var. meriana | Pypie   | 1 F | Flowers/bulb         | Flowers /<br>foliage | Hand | Least<br>Concern | Locally indigenous    | False Bay<br>Ecology<br>Park area     | D. Gibbs,<br>personal<br>communication                                |
| IRIDACE  | AE W       | <i>latsonia</i> spp.                       |   | 3   | Rhizome              | Medicine             | Hand | Least<br>Concern | Locally<br>indigenous | Cape Town -<br>general                | Harvester<br>informants,<br>personal<br>communication                 |
| ARACEA   | AE Za<br>L |  | White or<br>common arum<br>lily / Wit varkoor | 1   | Flowers /<br>foliage | Flowers /<br>foliage | Hand | Least<br>Concern | Locally<br>indigenous | Atlantis<br>Conservation<br>Area      | T. Abrahams<br>and C. McKie,<br>personal<br>communication             |

Apppendix 2. The totality of locally collected fauna species from within the City of Cape Town and related information.

| Class        | Scientific Name               | Common<br>Names<br>(English /<br><i>Afrikaans</i> ) | N | Harvest<br>target | Common<br>usage | Capture                  | Red List<br>status | Indigenous-ness       | Source                                     | References  |
|--------------|-------------------------------|---|---|-------------------|-----------------|--------------------------|--------------------|-----------------------|--|---|
| Aves         | Alpochen<br>aegyptiaca        | Egyptian<br>goose                                   | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | Cape Town<br>general                       | L. Isaacs,<br>personal<br>communication               |
| Reptilia     | Amplorhinus<br>multimaculatus | Many spotted<br>snake                               | 1 | Animal            | Medicine        | Hand                     | Not listed         | Locally indigenous    | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communication |
| Aves         | Anas capensis                 | Cape teal   | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communication               |
| Aves         | Anas<br>erythrorhyncha        | Red-billed<br>teal                                  | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communication               |
| Aves         | Anas<br>platyrhynchos         | Mallard   | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communication               |
| Aves         | Anas smithii                  | Cape<br>shoveller                                   | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communication               |
| Aves         | Anas sparsa                   | African black<br>duck                               | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communicatio                |
| Aves         | Anas undulata                 | Yellow-billed<br>duck                               | 1 | Animal            | Food<br>source  | Trap /<br>snare          | Least<br>Concern   | Locally indigenous    | All<br>waterways                           | L. Isaacs,<br>personal<br>communicatio                |
| Mammalia     | Arctocephalus<br>pusillus     | Cape fur seal                                       | 1 | Animal            | Medicine        | Hand                     | Least<br>Concern   | Locally<br>indigenous | Macassar /<br>Wolfgat<br>Nature<br>Reserve | H. Mananga,<br>personal<br>communicatio               |
| Polychaeta   | Arenicola loveni              | Bloodworm   | 1 | Animal            | Bait            | Pump                     | Not listed         | Locally indigenous    | Muizenberg<br>shoreline                    | Harvester<br>informants,<br>personal<br>communicatio  |
| Osteichthyes | Argyrosomus spp.              | Kob   | 1 | Animal            | Food<br>source  | Boat                     | Not listed         | Locally<br>indigenous | False Bay<br>Coastline<br>(TMNP)           | Harvester<br>informants,<br>personal<br>communicatio  |
| Mammalia     | Bathyergus suillus            | Cape dune<br>molerat                                | 1 | Animal            | Food<br>source  | Trap /<br>snare /<br>dog | Least<br>Concern   | Locally indigenous    | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Bitis arietans                | Puff adder  | 1 | Animal            | Medicine        | Hand                     | Not listed         | Locally indigenous    | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Bitis atropos                 | Berg adder  | 1 | Animal            | Medicine        | Hand                     | Least<br>Concern   | Locally<br>indigenous | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communicatio  |

| Reptilia      | Bradypodion<br>pumilum       | Cape dwarf<br>chameleon                        | 1  | Animal | Medicine<br>/<br>Gambling<br>/ Sport /<br>Pet trade | Hand | Not listed       | Locally<br>indigenous    | Cape Town<br>general                       | C. Dorse,<br>personal<br>communication  |
|---------------|------------------------------|--|----|--------|---|------|------------------|--------------------------|--|---|
| Gastropoda    | Bullia spp.                  | Plough shells                                  | 5  | Animal | Food<br>source /<br>Bait                            | Hand | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)           | Harvester<br>informants,<br>personal<br>communication   |
| Insecta       | Butterflies                  | all species                                    | 5  | Animal | Pet trade / collectors                              | Net  | Listed           | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park      | Harvester<br>informants,<br>personal<br>communication   |
| Insecta       | Butterflies                  | all species                                    | 29 | Animal | Pet trade / collectors                              | Net  | Not listed       | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park      | CoCT /<br>Geertsema<br>(2004)   |
| Crustacea     | Callianassa<br>kraussi       | Estuarine<br>mudprawn<br>/African<br>sandprawn | 1  | Animal | Bait  | Pump | Not listed       | Locally<br>indigenous    | Zandvlei<br>Estuary                        | Harvester<br>informants,<br>personal<br>communication   |
| Reptilia      | Chersina<br>angulata         | Angulate<br>tortoise                           | 1  | Animal | Medicine<br>/ Pet trade<br>/<br>Collectors          | Hand | Not listed       | Locally<br>indigenous    | Macassar /<br>Wolfgat<br>Nature<br>Reserve | H. Mananga,<br>personal<br>communication  |
| Pteriomorphia | Choromytilus spp.            | Black mussel                                   | 5  | Animal | Food<br>source /<br>Bait                            | Hand | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)           | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester<br>informants,<br>personal<br>communication |
| Osteichthyes  | Chrysoblephus<br>cristiceps  | Dageraad                                       | 1  | Animal | Food<br>source                                      | Net  | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)           | Harvester<br>informants,<br>personal<br>communication   |
| Osteichthyes  | Chrysoblephus<br>gibbiceps   | Red<br>stumpnose /<br>Miss Lucy                | 1  | Animal | Food<br>source                                      | Net  | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)           | Harvester<br>informants,<br>personal<br>communication   |
| Insecta       | Colophon beetles             | all species                                    | 2  | Animal | Pet trade / collectors                              | Hand | Endangered       | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park      | C. Dorse,<br>personal<br>communication  |
| Reptilia      | Crotaphopeltis<br>hotamboeia | Herald snake                                   | 1  | Animal | Medicine<br>/ Pet trade<br>/<br>Collectors          | Hand | Not listed       | Locally indigenous       | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communication   |
| Osteichthyes  | Cyprinus carpio              | Common carp                                    | 1  | Animal | Food<br>source                                      | Hand | Vulnerable       | Alien to South<br>Africa | All<br>waterways                           | D. Gibbs,<br>personal<br>communication  |
| Reptilia      | Dasypeltis scabra            | Rhombic egg<br>eater                           | 1  |        | Medicine<br>/ Pet trade<br>/<br>Collectors          | Hand | Least<br>Concern | Locally<br>indigenous    | Cape Town<br>general                       | Harvester<br>informants,<br>personal<br>communication   |

| Osteichthyes   | Dichistius<br>capensis      | Galjoen  | 1  | Animal | Food<br>source                             | Net                      | Not listed       | Locally<br>indigenous | False Bay<br>Coastline<br>(TMNP)                 | Harvester<br>informants,<br>personal<br>communication                      |
|----------------|-----------------------------|--|----|--------|--|--------------------------|------------------|-----------------------|--|--|
| Polyplacophora | Dinoplax gigas              | Larger chiton,<br>Giant chiton<br>or Armadillo | 11 | Animal | Food<br>source /<br>Bait                   | Hand                     | Not listed       | Locally<br>indigenous | False Bay<br>Coastline<br>(TMNP)                 | Harvester<br>informants,<br>personal<br>communication                      |
| Reptilia       | Dispholidus typus           | Boomslang                                      | 1  | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous | Cape Town<br>general                             | Harvester<br>informants,<br>personal<br>communicatior                      |
| Bivalvia       | Donax serra                 | White mussel<br>/ Sand mussel                  | 3  | Animal | Food source                                | Hand                     | Not listed       | Locally indigenous    | Muizenberg<br>shoreline                          | D. Gibbs,<br>personal<br>communication                                     |
| Reptilia       | Duberria lutrix             | Common slug<br>eater                           | 1  |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Least<br>Concern | Locally<br>indigenous | Cape Town<br>general                             | Harvester<br>informants,<br>personal<br>communicatior                      |
| Aves           | Estrilda astrild            | Common<br>waxbill                              |    |        | Pet trade / collectors                     | Net                      | Least<br>Concern | Locally indigenous    | Cape Town<br>general                             | D. Gibbs,<br>personal<br>communication                                     |
| Mammalia       | Felis caracal               | Caracal /<br><i>Rooicat</i>                    | 1  | Animal | Gambling<br>/ sport                        | Trap /<br>snare /<br>dog | Not listed       | Locally indigenous    | Cape Town<br>general                             | C. Dorse,<br>personal<br>communication                                     |
| Aves           | Fulica cristata             | Red-knobbed<br>coot or<br>Crested coot         | 1  | Animal | Food<br>source                             | Trap /<br>snare          | Least<br>Concern | Locally indigenous    | All<br>waterways                                 | L. Isaacs,<br>personal<br>communication                                    |
| Gastropoda     | Haliotis midae              | Abalone  | 1  | Animal | Food<br>source /<br>Medicine               | Boat                     | Not listed       | Locally<br>indigenous | Coastline  | Harvester<br>informants,<br>personal<br>communication                      |
| Arachnida      | Harpactira<br>lightfooti    | Baboon<br>spiders                              | 1  |        | Pet trade / collectors                     | Hand                     | Not listed       | Locally indigenous    | Table<br>Mountain<br>National<br>Park            | C. Dorse,<br>personal<br>communication                                     |
| Gastropoda     | Hipponix conicus            | Hoof limpets                                   | 1  | Animal | Food<br>source /<br>Bait                   | Hand                     | Not listed       | Locally<br>indigenous | False Bay<br>Coastline<br>(TMNP)                 | Harvester<br>informants,<br>personal<br>communication                      |
| Reptilia       | Homopus<br>areolatus        | Parrotbeaked<br>tortoise                       | 1  |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Not listed       | Locally indigenous    | Kenilworth<br>Racecourse<br>Conservatior<br>Area | M. Beukes,<br>personal<br>communication                                    |
| Reptilia       | Homoroselaps<br>lacteus     | Spotted<br>harlequin<br>snake                  | 1  |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Not listed       | Locally indigenous    | Cape Town<br>general                             | Harvester<br>informants,<br>personal<br>communication                      |
| Mammalia       | Hystrix<br>africaeaustralis | Cape<br>porcupine                              | 1  | Animal | Food source                                | Trap /<br>snare          | Least<br>Concern | Locally indigenous    | Cape Town<br>general                             | H. Mananga,<br>personal<br>communication                                   |
| Malacostraca   | Jasus lalandii              | West Coast<br>rock lobster                     | 1  | Animal | Food<br>source                             | Boat                     | Not listed       | Locally<br>indigenous | Coastline  | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester<br>informants, |

|              |                              |  |   |        |  |                          |                    |                          |                                  | personal communicatio                                 |
|--------------|------------------------------|--|---|--------|--|--------------------------|--------------------|--------------------------|----------------------------------|---|
| Reptilia     | Lamprophis<br>aurora         | Aurora house<br>snake                      | 1 |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Least<br>Concern   | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Lamprophis<br>capensis       | Brown house<br>snake                       | 1 |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Not listed         | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Lamprophis<br>fuscus         | Yellow bellied<br>house snake              | 1 |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Near<br>Threatened | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Lamprophis<br>inornatus      | Olive house<br>snake                       | 1 |        | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Least<br>Concern   | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Reptilia     | Leptotyphlops<br>nigricans   | Cape worm<br>Snake                         | 1 | Animal | Medicine                                   | Hand                     | Not listed         | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Mammalia     | Lepus capensis               | Cape hare                                  | 1 | Animal | Food<br>source                             | Trap /<br>snare /<br>dog | Least<br>Concern   | Locally indigenous       | Cape Town<br>general             | C. Dorse,<br>personal<br>communicatio                 |
| Mammalia     | Lepus saxitilis              | Scrub hare                                 | 1 | Animal | Food<br>source                             | Trap /<br>snare /<br>dog | Not listed         | Locally indigenous       | Cape Town<br>general             | D. Gibbs,<br>personal<br>communicatio                 |
| Osteichthyes | Lichia amia                  | Garrick /<br><i>Leervis</i>                | 1 | Animal | Food<br>source                             | Hand                     | Not listed         | Locally indigenous       | Zandvlei<br>Estuary              | Harvester<br>informants,<br>personal<br>communication |
| Osteichthyes | Lithognathus<br>lithognathus | White<br>steenbras<br>(pignose<br>grunter) | 1 | Animal | Food<br>source                             | Net                      | Near<br>Threatened | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP) | Harvester<br>informants,<br>personal<br>communication |
| Osteichthyes | Liza richardsonii            | Mullets /<br>harders                       | 1 | Animal | Food<br>source                             | Net                      | Not listed         | Locally indigenous       | False Bay<br>Coastline<br>(TMNP) | Marine and<br>Coastal<br>Management<br>(2008)         |
| Reptilia     | Lycodonomorphus<br>rufulus   | Common<br>brown water<br>snake             | 1 | Animal | Medicine                                   | Hand                     | Not listed         | Locally<br>indigenous    | Cape Town<br>general             | Harvester<br>informants,<br>personal<br>communicatio  |
| Bivalvia     | Mactra glabrata              | smooth trough<br>shell                     | 1 | Animal | Food<br>source /<br>Bait                   | Hand                     | Not listed         | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP) | Harvester<br>informants,<br>personal<br>communicatio  |
| Bivalvia     | Mytilus<br>galloprovincialis | Mediterranean<br>mussel                    | 1 | Animal | Food<br>source                             | Hand                     | Not listed         | Alien to South<br>Africa | Atlantic<br>Coastline<br>(TMNP)  | Harvester<br>informants,<br>personal<br>communicatio  |
| Osteichthyes | Myxus capensis               | Freshwater<br>mullet                       | 1 | Animal | Food<br>source                             | Net                      | Least<br>Concern   | Locally<br>indigenous    | All<br>waterways                 | Harvester<br>informants,<br>personal<br>communicatio  |

| Reptilia     | Naja nivea                 | Cape cobra                             | 1  | Animal | Medicine                                   | Hand            | Not listed       | Locally indigenous      | Cape Town<br>general             | Harvester<br>informants,<br>personal   |
|--------------|----------------------------|--|----|--------|--|-----------------|------------------|-------------------------|----------------------------------|--|
|              |                            |  |    |        |  |                 |                  |                         |                                  | communicatio   |
| Aves         | Netta<br>erythrophthalma   | Southern pochard                       | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | Locally indigenous      | All<br>waterways                 | L. Isaacs,<br>personal<br>communicatio   |
| Gastropoda   | Nodilittorina<br>africana  | Periwinkle                             | 1  | Animal | Food<br>source /<br>Bait                   | Hand            | Not listed       | Locally<br>indigenous   | False Bay<br>Coastline<br>(TMNP) | Marine and<br>Coastal<br>Management<br>(2008)  |
| Aves         | Numida meleagris           | Guinea fowl                            | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | South Africa indigenous | Cape Town<br>general             | P. Glanville,<br>personal<br>communicatio  |
| Cephalopoda  | Octopus vulgaris           | Octopus                                | 1  | Animal | Food<br>source /<br>Bait                   | Boat            | Not listed       | Locally<br>indigenous   | Coastline                        | Marine and<br>Coastal<br>Management<br>(2008)  |
| Aves         | Oxyura maccoa              | Maccoa duck                            | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | Locally indigenous      | All<br>waterways                 | L. Isaacs,<br>personal<br>communicatio   |
| Osteichthyes | Pachymetopon<br>blochii    | Hottentot                              | 1  | Animal | Food<br>source                             | Net             | Not listed       | Locally<br>indigenous   | False Bay<br>Coastline<br>(TMNP) | Marine and<br>Coastal<br>Management<br>(2008)  |
| Gastropoda   | <i>Patella</i> spp         | Limpets                                | 13 | Animal | Food<br>source /<br>Bait                   | Hand            | Not listed       | Locally<br>indigenous   | False Bay<br>Coastline<br>(TMNP) | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester<br>informants,<br>personal<br>communicatio |
| Reptilia     | Pelomedusa<br>subrufa      | Marsh<br>terrapin                      | 1  | Animal | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand            | Not listed       | Locally<br>indigenous   | Cape Town<br>general             | D. Gibbs,<br>personal<br>communicatio  |
| Osteichthyes | Petrus rupestris           | Red steenbras<br>(Copper<br>steenbras) | 1  | Animal | Food<br>source                             | Net             | Not listed       | Locally<br>indigenous   | False Bay<br>Coastline<br>(TMNP) | Harvester<br>informants,<br>personal<br>communicatio   |
| Aves         | Plectropterus<br>gambensis | Spur-winged<br>Goose                   | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | Locally indigenous      | All<br>waterways                 | L. Isaacs,<br>personal<br>communicatio   |
| Aves         | Podiceps cristatus         | Great crested<br>grebe                 | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | Locally indigenous      | All<br>waterways                 | L. Isaacs,<br>personal<br>communicatio   |
| Aves         | Podiceps<br>nigricollis    | Black-necked<br>grebe                  | 1  | Animal | Food<br>source                             | Trap /<br>snare | Least<br>Concern | Locally indigenous      | All<br>waterways                 | L. Isaacs,<br>personal<br>communicatio   |
| Osteichthyes | Pomatomus<br>saltatrix     | Elf (Shad)                             | 1  | Animal | Food<br>source                             | Net             | Not listed       | Locally<br>indigenous   | False Bay<br>Coastline<br>(TMNP) | Harvester<br>informants,<br>personal<br>communicatio   |
| Mammalia     | Procavia capensis          | Rock dassie                            | 1  | Animal | Medicine                                   | Hand            | Least<br>Concern | Locally indigenous      | Cape Town<br>general             | Harvester<br>informants,<br>personal   |

|              |                            |                            |   |        |  |                          |                  |                          |                                       | communication   |
|--------------|----------------------------|----------------------------|---|--------|--|--------------------------|------------------|--------------------------|---------------------------------------|---|
| Reptilia     | Prosymna<br>sundevallii    | Sundevall's shovel-snout   | 1 | Animal | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Not listed       | Locally indigenous       | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communication       |
| Reptilia     | Psammobates<br>geometricus | Geometric<br>tortoise      | 1 | Animal |  | Hand                     | Endangered       | Locally<br>indigenous    | Table<br>Mountain<br>National<br>Park | H. Mananga,<br>personal<br>communication                    |
| Reptilia     | Psammophis<br>crucifer     | Cross marked<br>whip snake | 1 | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous    | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communicatior       |
| Reptilia     | Psammophis<br>leightoni    | Cape whip<br>snake         | 1 | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous    | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communicatior       |
| Reptilia     | Psammophis<br>notostictus  | Karoo whip<br>snake        | 1 | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous    | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communication       |
| Reptilia     | Psammophylax<br>rhombeatus | Spotted<br>skaapsteker     | 1 | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous    | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communication       |
| Reptilia     | Pseudaspis cana            | Mole snake                 | 1 | Animal | Medicine                                   | Hand                     | Not listed       | Locally<br>indigenous    | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communicatior       |
| Aves         | Pternistis<br>capensis     | Francolin                  | 1 | Animal | Food<br>source                             | Trap /<br>snare          | Not listed       | Locally indigenous       | Cape Town<br>general                  | H. Mananga,<br>personal<br>communication                    |
| Ascidiacea   | Pyura stolonifera          | Red bait                   | 1 | Animal | Food<br>source                             | Hand                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)      | Harvester<br>informants,<br>personal<br>communicatior       |
| Reptilia     | Ramphotyphlops<br>braminus | Flowerpot<br>snake         | 1 | Animal | Medicine<br>/ Pet trade<br>/<br>Collectors | Hand                     | Not listed       | Alien to South<br>Africa | Cape Town<br>general                  | Harvester<br>informants,<br>personal<br>communication       |
| Mammalia     | Raphicerus<br>campestris   | Steenbok                   | 1 | Animal | Food<br>source /<br>Gambling<br>/ Sport    | Trap /<br>snare /<br>dog | Least<br>Concern | Locally<br>indigenous    | Cape Town<br>general                  | C. Dorse,<br>personal<br>communication                      |
| Mammalia     | Raphicerus<br>melanotis    | Cape grysbok               | 1 | Animal | -  | Trap /<br>snare /<br>dog | Least<br>Concern | Locally<br>indigenous    | Cape Town<br>general                  | L. Isaacs,<br>personal<br>communication                     |
| Osteichthyes | Seriola lalandi            | Yellowtail                 | 1 | Animal | <u>^</u>                                   | Boat                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)      | Harvester<br>informants,<br>personal<br>communication       |
| Gastropoda   | Siphonaria spp             | False limpets              | 4 | Animal | Food<br>source /<br>Bait                   | Hand                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)      | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester |

| Bivalvia     | Striostrea<br>margaritacea | Cape rock                  | 1. | Animal |   | Hand                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline            | informants,<br>personal<br>communication<br>Marine and<br>Coastal                                       |
|--------------|----------------------------|----------------------------|----|--------|---|--------------------------|------------------|--------------------------|-----------------------------------|---|
|              | margarnacea                | oyster                     |    |        | source                                  |                          |                  | margenous                | (TMNP)                            | Management<br>(2008),<br>Harvester<br>informants,<br>personal<br>communication                          |
| Amphibia     | Strongylopus<br>grayii     | Clicking stream frog       | 1. | Animal | Pet trade / collectors                  | Hand                     | Least<br>Concern | Locally indigenous       | Cape Town general                 | L. Isaacs,<br>personal<br>communication   |
| Aves         | Struthio camelus           | Ostrich                    | 1. | Animal | Gambling<br>/ sport                     | Dog                      | Least<br>Concern | Locally indigenous       | Cape Town general                 | D. Gibbs,<br>personal<br>communication  |
| Mammalia     | Sylvicapra<br>grimmia      | Common<br>duiker           | 1. | Animal | Food<br>source /<br>Gambling<br>/ Sport | Trap /<br>snare /<br>dog | Least<br>Concern | Locally indigenous       | Cape Town<br>general              | C. Dorse,<br>personal<br>communication  |
| Aves         | Tachybaptus<br>ruficollis  | Little grebe               | 1. | Animal | Food<br>source                          | Trap /<br>snare          | Least<br>Concern | Locally indigenous       | All<br>waterways                  | L. Isaacs,<br>personal<br>communication   |
| Aves         | Tadorna cana               | South African shelduck     | 1. | Animal | Food<br>source                          | Trap /<br>snare          | Least<br>Concern | Locally indigenous       | All<br>waterways                  | L. Isaacs,<br>personal<br>communication   |
| Bivalvia     | Tellina alfredensis        | Pink Port<br>Alfred tellin | 1. | Animal | Bait                                    | Hand                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)  | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester<br>informants,<br>personal<br>communication |
| Osteichthyes | Thyrsites atun             | Snoek (Cape<br>snoek)      | 1. | Animal | Food<br>source                          | Boat                     | Not listed       | Locally indigenous       | False Bay<br>Coastline<br>(TMNP)  | Harvester<br>informants,<br>personal<br>communication   |
| Osteichthyes | Tilapia<br>sparrmanii      | Tilapia                    | 1. | Animal | Food<br>source                          | Hand                     | Least<br>Concern | Alien to South<br>Africa | False Bay<br>Ecology<br>Park area | D. Gibbs,<br>personal<br>communication  |
| Gastropoda   | Turbo sarmaticus           | Allikruekel                | 1  | Animal | Food<br>source /<br>Bait                | Hand                     | Not listed       | Locally<br>indigenous    | False Bay<br>Coastline<br>(TMNP)  | Marine and<br>Coastal<br>Management<br>(2008),<br>Harvester<br>informants,<br>personal<br>communication |
| Gastropoda   | <i>Turritella</i> spp.     | Screw shells               | 3  | Animal | Food<br>source /<br>Bait                | Hand                     | Not listed       | Locally indigenous       | False Bay<br>Coastline<br>(TMNP)  | Harvester<br>informants,<br>personal<br>communication   |
| Reptilia     | Typhlops lalandei          | Delalande's<br>blind snake | 1. | Animal | Medicine                                | Hand                     | Not listed       | Locally indigenous       | Cape Town<br>general              |   |

|              |                |              |          |             |      |            |            |           | communication |
|--------------|----------------|--------------|----------|-------------|------|------------|------------|-----------|---------------|
| Malacostraca | Upogebia       | Estuarine    | 1 Animal | Bait        | Pump | Not listed | Locally    | Coastline | Harvester     |
|              | africana       | mudprawn     |          |             |      |            | indigenous |           | informants,   |
|              |                |              |          |             |      |            |            |           | personal      |
|              |                |              |          |             |      |            |            |           | communicatio  |
| Arachnida    | Uroplectes     | Lesser thick | 1 Animal | Medicine    | Hand | Not listed | Locally    | Table     | Harvester     |
|              | insignus       | tailed       |          | / Pet trade |      |            | indigenous | Mountain  | informants,   |
|              |                | scorpion     |          | /           |      |            |            | National  | personal      |
|              |                |              |          | Collectors  |      |            |            | Park      | communicatio  |
| Arachnida    | Uroplectes     | Lesser thick | 1 Animal | Medicine    | Hand | Not listed | Locally    | Table     | Harvester     |
|              | lineatus       | tailed       |          | / Pet trade |      |            | indigenous | Mountain  | informants,   |
|              |                | scorpion     |          | /           |      |            |            | National  | personal      |
|              |                |              |          | Collectors  |      |            |            | Park      | communicatio  |
| Amphibia     | Xenopus laevis | Common       | 1 Animal | Pet trade / | Hand | Least      | Locally    | Cape Town | C. Dorse,     |
|              | (Daudin, 1802) | platanna     |          | collectors  |      | Concern    | indigenous | general   | personal      |
|              |                |              |          |             |      |            |            |           | communicatio  |
| Gastropoda   |                | Alikruekel   | 4 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                |              |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            |            | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            |           | communication |
| Gastropoda   |                | Keyhole      | 5 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                | limpets      |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            |            | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            |           | communicatio  |
| Gastropoda   |                | Slipper      | 4 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                | limpets      |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            |            | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            |           | communicatio  |
| Gastropoda   |                | Top snails   | 8 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                | -            |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            | -          | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            |           | communication |
| Gastropoda   |                | Tritons      | 3 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                |              |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            | -          | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            | · · · ·   | communicatio  |
| Maxillopoda  |                | Barnacles    | 3 Animal | Food        | Hand | Not listed | Locally    | False Bay | Harvester     |
|              |                |              |          | source /    |      |            | indigenous | Coastline | informants,   |
|              |                |              |          | Bait        |      |            | e          | (TMNP)    | personal      |
|              |                |              |          |             |      |            |            | ` '       | communication |