

ALIEN INVASIVE PLANTS IN THE KRUGER NATIONAL PARK

Butterfly ginger

Hedychium coronarium

This is sweetly scented when in flower but
is also escaping into the streams of
KwaZulu-Natal





Kahili ginger

Hedychium gardnerianum

This is a most attractive species, with scented flowers. It is escaping into riverine systems in KwaZulu-Natal. Do not let it into your system in the KNP.





Red ginger

Hedychium coccineum

Another species with the potential to escape into the riverine fringes.



Wild ginger

Zingiber zerumbet

This species is closely related to culinary ginger. The image on the left is of the flower spike.





Shell ginger

Alpinia zerumbet

This is found in both the green and variegated forms. The image below is of the seeds setting on the variegated form.

Left: The variegated form of the shell ginger



Spiral ginger

Costus speciosus

This species has not shown any signs of setting seed but it has the potential of reproducing vegetatively. It has a twist in the stem hence its common name.



CREEPERS

Goose-foot plant

Syngonium podophyllum

This plant has the potential to escape. It is able to produce viable seed in South Africa as well as growing very easily from cuttings. The mature fruits are shown below.



A close-up of the fruits of the **Barbados goose-berry**. Birds and mammals will spread this species as they do with the other members of the cactus family.

Barbados gooseberry

Pereskia aculeata

The images on p.11 and below are of the plant in the staff village in house number 3. The picture on the right is of a hedge in a private garden in Durban.



Coral creeper

Antigonon leptopus

Another creeper that will spread rapidly because it sets viable seed. It is already in the bush around the Skukuza Camp.





Slender potato creeper

Solanum seaforthianum

This is a plant that spreads rapidly as its red fruits are highly sought after by birds and mammals.



Moonflower

Ipomoea alba

This species is already in the stream that runs through the Skukuza Staff Village and it will be spread from there into the riverine bush of the Crocodile and Sabie Rivers.

Blue pea vine
Clitoria ternatea

An attractive but dangerous species spreading in the hedges of the Staff Village.



Dutchman's pipe
Aristolochia elegans

This is another weed of the hedges and riverine bush in the KNP. It is found as far north as the Limpopo River. The seed is wind dispersed.



BIGNONIACEAE

The jacaranda family is a serious potential threat in the dry Bushveld regions of the country.

The yellow bells (*Tecoma stans*) has already escaped in the riverine areas of Durban. The papery thin seeds of this family are dispersed by the wind and spread very rapidly over the landscape. Seeds mature at the beginning of spring, just as the rains begin to fall, allowing this species and other members in the family to escape into the natural systems of the Park. In the moister riverine areas of the KNP members of this plant family need to be closely monitored.

Jacaranda

Jacaranda mimosiflora

This tree has escaped in the moister parts around Nelspruit and Barberton. It is likely to get into the Sabie and Crocodile River riverine fringes.





Cat's claw creeper
Macfedyena unguiscati

This is a creeping member of this family, already escaping in the staff village.



Leucana or Ipil-Ipil tree
Leucana leucocephala

This is a real problem plant in the Durban region. It arrived in the last 20 years and is now spreading very rapidly along road verges and riverine areas. We have found 5 plants in the Skukuza staff village. They have been removed but vigilance is needed to ensure this species does not escape into the river system. It will form stands that are as dense as any of the Lantana thickets that occur on the Sabie River.



Indian laurel

Listia glutinosa

This has not yet reached the Park but watch out for it. The tree resembles an avocado pear tree and is very difficult to remove once it gets established.



Camphor tree

Cinnamomum camphora

This is already in the Skukuza staff village. It is also a member of the Laurel family. There are only a few specimens but they need to be removed immediately.





Balloon vine

Cardiospermum grandiflorum

This is another creeper that could escape into the riverine areas. The Sabie, Crocodile, Komati and Levuvhu River systems are most at risk. Proper monitoring of the riverine fringes for these plants is essential on an annual basis.



Queen of the night cactus

Hylocereus undatus

This night-flowering cactus is fortunately sterile and only propagates from pieces. It is a climber and will get up into large trees and eventually the weight will collapse the branches.



Trifid weed

Chromolaena odorata

This arrived in the Park in the Crocodile River. It is a wind-dispersed species that produces its seeds at the beginning of the rainy season. Ensure this species does not get a toehold in the KNP.



no picture

Sensitive plant

Mimosa pigra

This is an attractive plant used medicinally by local inhabitants. It escapes and is difficult to remove once it is able to set seed. Herbicides are difficult to apply as the leaves close when touched.



Mauritius thorn
Caesalpinia decapetala



Fingers
Kalanchoe tubiflora

This species has already escaped into the KNP along the village fence that fronts onto the Sabie River. It is found in camps like Lower Sabie and Pretoriuskop. Succulent species are a real threat to the natural vegetation as they are adapted to the harsh Bushveld winters allowing them to survive until the next rainy season. This species, along with other members of this family, is able to propagate via cuttings and leaf pieces.



Cassia and senna

These are shrubs that occur in clearings in the riverine bush, sandy riverbeds and other disturbed areas around human habitation. *Senna occidentalis* has yet to be found in the KNP.



Senna bicapsularis
Senna occidentalis
Senna septentrionalis

This species is common around the Skukuza village.



Peanut-butter cassia
Senna didymobotrya

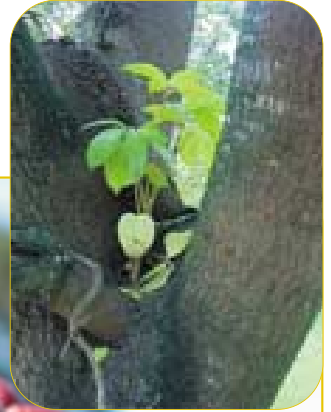


Queensland umbrella tree
Schefflera actinophylla

This species has already begun to escape from the staff village at Skukuza. Seedlings have been noticed in trees and gutters growing as epiphytes.



A seedling of the Queensland umbrella tree growing in a crotch of a tree in the grounds of the village swimming pool.







Schefflera arboricola

This is a similar species to *S. actinophylla*. This is a scandent shrub that has begun to seed itself in the Durban Metropolitan Region. It is spread by birds and mammals. Keep both these species out of the Kruger National Park.

Sword fern
Nephrolepis exaltata

This fern can be either a terrestrial or an epiphytic fern.
It will take over damp areas where local plants would
otherwise grow.



Blue fern
Polypodium aureum

This epiphytic fern will escape into damp areas
and take away niches where the indigenous leopard
orchid (*Ansellia africana*) would grow. If the
fern establishes in an existing orchid plant it will
eventually kill the orchid.





Loquat

Eriobotrya japonica

A slow-spreading species that has already formed seedlings in the Skukuza Staff Village.

Mulberry

Morus alba

This has already begun to escape in the Staff Village at Skukuza.



Guavadilla

Passiflora flavicarpa

This has larger fruit and, since it is more vigorous, will escape into riverine areas.



Purple granadilla

Passiflora edulis

This has smaller hen's egg-size fruits that are purple when ripe. It has escaped and is seen in the north of the KNP.





Guava

Psidium guajava

This is the most palatable of all the introduced fruits that could be spread in the Park. In KwaZulu-Natal this plant has taken over thousands of hectares of land.





Talinum paniculatum

This is another herb that could escape, with its succulent leaves and fleshy underground rootstock. Herbicide is the best method of control in this instance.





Common apple thorn

Daruta stramonium

This is more of an agricultural weed that will spread along water courses in the KNP.



Stachytapheta urticifolia (blue flowers)

Stachytapheta mutabilis (red flowers.)

These species have hybridized in the Skukuza Staff Village gardens forming a mauve, larger-flowered plant. Whether this hybrid is fertile or not still needs to be ascertained. However the parent plants do set seed and they spread along road edges and around human habitation.





Pride of India

Lagerstroemia indica

This species is setting seed in the Staff Village and must be removed before it escapes to riverine areas. The species is deciduous and will survive the normal dry seasons in the Park.

Red sesbania

Sesbania punicea

This is a serious pest in riverine areas. Remove from cultivation.





Syringa
Melia azedarach

Another riverine threat spread by birds and mammals.





Hedge water berry

Syzygium paniculatum

A common hedging plant with edible purple fruits.



**Cherry hedge or
Surinam cherry**

Eugenia uniflora

Another species that is likely to spread if allowed to survive in the KNP.



GRASSES

Pampas grass

Cortaderia selloana

This sets seed and is spread by wind. It is not serious in the Village, but needs to be eradicated, before the plant escapes.

NO PICTURE FOUND

Fountain grass

Pennisetum setaceum

The two cultivars of this species have escaped in the Durban Metropolitan area. They will outcompete our natural grass species.

Spanish reed
Arundo donax

This is a Phragmites look-alike. Fortunately it is sterile and only propagates vegetatively. There is a variegated form in horticulture that needs to be eradicated. It is much taller than Phragmites.



NO PICTURE FOUND

American agave

Agave americana

A plant of old homesteads that is more unsightly than invasive.

Narrow-leaved sisal

Agave vivipara

This began as an ornamental plant and is now used as a barrier plant. It suckers prolifically and makes propagules from bulbils that form on the old flower heads.

Right: a closeup view of seeds and a bulbil forming

Below: a closeup of the flowers, pollinated by sunbirds.



Polka dot plant

Hypoestes sanguinolenta

NO PICTURE

Forget-me-not tree

Duranta repens

Birds are spreading this species in the subtropical parts of KwaZulu-Natal.





Pickerel weed

Pontederia cordata

This has found its way into ponds in the Skukuza camp and Staff Village. Rather use local water or indigenous wetland plant species.





Wild canna

Canna indica

There are many hybrids of this plant. Already a population has established itself near the golf course at Skukuza.

Kalanchoe daigremontiana

A succulent with the potential to escape.

NO PICTURE



Large purple alternanthera

Alternanthera dentata

Another garden weed that will follow streams and the damp edges of roads.



Orange-flowered milkweed

Asclepias curassavica

A nuisance plant that will become as numerous as the *Zinnia peruviana* or Wildejakobregop.

Wild poinsettia weed
Euphorbia cayathophora

Another weed of disturbed areas around human habitation.

NO PICTURE



Yellow oleander
Thevetia peruviana

Already out of the Staff Village in garden refuse sites. There is an orange colour form of this species and both colour forms have the potential to escape.

NO PICTURE

COMMELINACEAE

This family of plants is a serious groundcover threat to the riverine areas of the KNP, because of the succulent fleshy leaves and stems and their ease of rooting.

Peace-in-the-home

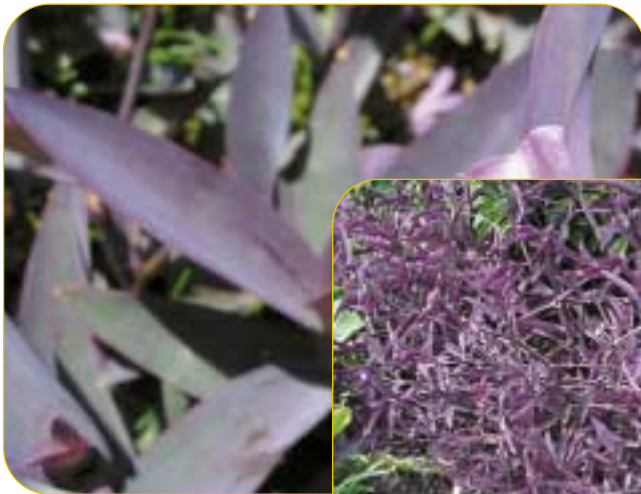
Callisia elegans

This is the worst plant in the Commelinaceae family to have escaped. Its small leaf size makes it difficult to eradicate all material. All the species in this family propagate very easily from cuttings.

Purple wandering Jew

Tradescantia pallida

This species has not escaped yet but it will if not eradicated from the Staff Village.





Wandering Jew
Tradescantia zebrina

This species is now in the streams around the Staff Village. Plants are thrown over the fences into the KNP.

Boat plant
Rhoeo spathacea

This is the slowest of the family to propagate and the least likely to escape from gardens. There are possibly two species in KNP - a shorter-leaved or dwarf species and the larger plants that are illustrated.





Blue ginger

Dichorisandra thyrsiflora

The least likely species to escape.
Relatively slow in reproducing itself.

