

**Table 1:** List of indigenous species which may, as a result of the historical occurrences (refer to SAIAB records) in the upper Crocodile River catchment, occur in the Bloubankspruit. Species names, common names, general biology and or environmental requirement and possible benefits to conservation endeavour listed.

PICTURE OF SPECIES	FAMILY/ORDER <i>Species</i> (English Common name) (Afrikaans common name)	IUCN RED DATA LISTING SA National rating Possibly provincial rating	General biology / environmental requirements	Benefits of a Bloubankspruit protected area to species.
	<b>ANGUILLIDAE</b> <i>Anguilla mossambica</i> <b>Eng.</b> Longfin Eel <b>Afr.</b> Geelbek-paling	<b>LEAST CONCERN</b> Least Concern <b>Extinct (to be proved)</b>	Catadromic species (breeds in the sea, grown in rivers). Carnivorous. Requires connectivity between Indian ocean and Bloubankspruit.	Due to the construction of barriers this species will never occur in the Bloubankspruit again. If an aquarium is est. for education purposes some may be brought into facilitate awareness.
	<b>CICHLIDAE</b> <i>Chetia flaviventris</i> <b>Eng.</b> Canary Kurper <b>Afr.</b> Kanariekurper	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Small carnivore feeds on invertebrates and fish fry. May be sensitive to extreme cold. Mouth-brooder. Breeds easily in nutrient rich systems.	Bloubankspruit may be too cold. Active measures are being taken to remove this sp. from Hartebeespoort Dam. Not a good candidate for conservation. Could be used in Dams.
	<b>CICHLIDAE</b> <i>Oreochromis mossambicus</i> <b>Eng.</b> Mozambique Tilapia <b>Afr.</b> Bloukurper	<b>NEAR THREATENED</b> Near Threatened Near Threatened (to be proved)	Tolerant sp. to modified water quality. Omnivore. Nesting sp. Requires water above 22°C. Near Thr. status due to the risk of hybridisation with <i>T. niloticus</i>	Bloubankspruit may be too cold. Dams in the area may be sufficient – promote angling of sp? Would have consistent difficulty maintaining population due to low temperatures.
	<b>CICHLIDAE</b> <i>Pseudocrenilabrus philander</i> <b>Eng.</b> Southern Mouthbrooder <b>Afr.</b> Suidlike mondbroeier	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Omnivorous mouth brooder. Tolerant sp. Common in slow vegetated areas of Bloubankspruit. Widely used in the control of mosquito larvae occurring in still waters.	Although no active management actions are required to maintain this sp. in the Bloubankspruit. If exotic predators proliferate, they may become a risk to the continued population stability. I.e. sp. does not do well in the presence of Bass.
	<b>CICHLIDAE</b> <i>Tilapia rendalli</i> <b>Eng.</b> Redbreast Tilapia <b>Afr.</b> Rooiborskurper	<b>LEAST CONCERN</b> <b>Possible non-endemic</b> Least Concern Least Concern (to be proved)	Predominantly herbivorous, nest making Cichlid. Considered to be tolerant of a wide range of temperatures and salinity. Requires slow flowing well vegetated areas.	Although this species may be useful to ecosystem managers in the management of water plants this sp. probably does not naturally occur in the area and as such is not suitable for use in the conservation endeavour.

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	<b>CICHLIDAE</b> <i>Tilapia sparrmanii</i> Eng. Banded Tilapia Afr. Vleikurper	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Omnivorous, nesting Cichlid preferring quiet waters. Tolerant to a wide range of temperatures and poor water quality.	Important sp. in that it occupies an important niche in an aquatic ecosystem, occupying quiet areas of the ecosystem acting as predator and prey.
	<b>CYPRINIDAE</b> <i>Barbus anoplus</i> Eng. Chubbyhead Barb Afr. Dikkop-ghieliementjie	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Omnivorous Barb, found in cool vegetated areas with sufficient cover. Breeds in summer. Relatively tolerant sp.	Common sp. in the Boubankspruit. Good candidate indicator species of ecosystem degradation. May consider providing instream cover to facilitate species.
	<b>CYPRINIDAE</b> <i>Barbus mattozi</i> Eng. Papermouth Afr. Papierbek/Silwervis	<b>LEAST CONCERN</b> Least Concern Endangered (to be proved)	Large Barb (reaching 25cm), active predator which is sensitive to water quality alterations. Considered to require specific flows, habitat and substrate. May be a migrating sp.	Ecologically important species to the conservation endeavour. The distribution of this sp. has been drastically reduced in SA and may locally (Gauteng) considered to be endangered. Management efforts required.
	<b>CYPRINIDAE</b> <i>Barbus motebensis</i> Eng. Marico Barb Afr. Marico-ghieliementjie	<b>VULNERABLE</b> Vulnerable Engangered (to be proved)	Similar to B. anoplus this Barbs distribution is isolated to the upper reaches of the Marico and Crocodile R. system. <b>Internationally recognised red data sp.</b>	The conservation of this species is crucial to its survival where the suitable habitats for this sp. has been reduced due to urban development and mining in Gauteng. <b>Should occur in the Bloubankspruit.</b>
	<b>CYPRINIDAE</b> <i>Barbus paludinosus</i> Eng. Straitfin Barb Afr. Lynvin- ghieliementjie	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Widely distributed, hardy omnivore. Prefers well vegetated quiet still waters.	This hardy species is found in the Bloubankspruit may be managed towards in that is a good fodder food for predating yellowfish, Papermouths etc. Indicator of extreme water quality alterations.
	<b>CYPRINIDAE</b> <i>Barbus trimaculatus</i> Eng. Threespot Barb Afr. Driekol-ghieliementjie	<b>LEAST CONCERN</b> Least Concern Vulnerable (to be proved)	Widely distributed, hardy carnivore. Prefers well vegetated quiet still waters but found in a variety of habitats.	This hardy species is found in the Bloubankspruit may be managed towards in that is a good fodder food for predating yellowfish, Papermouths etc. Indicator of extreme water quality alterations.

**Table 1 (Cont):** List of indigenous species which may, as a result of the historical occurrences (refer to SAIAB records) in the upper Crocodile River catchment, occur in the Bloubankspruit. Species names, common names, general biology and or environmental requirement and possible benefits to conservation endeavour listed.

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	<b>CYPRINIDAE</b> <i>Barbus untaeniatus</i> Eng. Longbeard Barb Afr. Langbaard-ghieliemientjie	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Widely distributed omnivore. Common in generally warm (above 22°C) waters. Occupies variety of habitats, thrives in dams.	If this species occurs in the Bloubankspruit, which is unlikely, due to the temperature requirements of this sp. It will be considered an important indicator sp to use in the management of the conservation endeavour.
	<b>CYPRINIDAE</b> <i>Labeo cylindricus</i> Eng. Redeye Labeo Afr. Rooioog-moddervis	<b>LEAST CONCERN</b> Least Concern <b>Vulnerable (to be proved)</b>	Herbivorous warm water preferring Labeo. Favours clear running waters (good swimmer), does well in lakes and dams dominated with algae.	Probably does not occur in Bloubankspruit and as such will not be considered in the conservation endeavour.
	<b>CYPRINIDAE</b> <i>Labeo molybdinus</i> Eng. Leaden Labeo Afr. Loodvis	<b>LEAST CONCERN</b> Least Concern <b>Vulnerable (to be proved)</b>	Refer to <i>L. cylindricus</i>	Refer to <i>L. cylindricus</i>
	<b>CYPRINIDAE</b> <i>Labeobarbus marequensis</i> Eng. Lowveld Largescale Yellowfish Afr. Laeveld Grootskubgeelvis	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Omnivorous, flow favouring yellowfish which dominated river ecosystems. Migrating sp. requiring connectivity of system.	Important to the conservation endeavour as an indicator sp. and a flagship sp. which is sought after by fly-fishermen. <b>To ensure population sustainability the connectivity of the system must be addressed.</b>
	<b>CYPRINIDAE</b> <i>Labeobarbus polylepis</i> Eng. Bushveld smallscale Yellowfish Afr. Bosveld Kleinkubgeelvis	<b>LEAST CONCERN</b> Least Concern <b>Vulnerable (to be proved)</b>	Cold water preferring yellowfish which is a ferocious predator. Common in the upper reaches of rivers. Migrating sp. but little is known concerning the flow requirements of this sp.	Important to the conservation endeavour as an indicator sp. and a flagship sp. which is sought after by fly-fishermen. <b>To ensure population sustainability the connectivity of the system must be addressed.</b>
	<b>SILUROIDEI</b> <i>Amphilius uranoscopus</i> Eng. Stargazer Mountain Catfish Afr. Gewone bergbaber	<b>LEAST CONCERN</b> Least Concern <b>Endangered (to be proved)</b>	Very sensitive sp. requiring good quality water and habitat (well oxygenated diverse flows). Invertivorous sp. which is susceptible to predation.	Very important indicator sp. to the conservation endeavour. The pollution of systems has reduced the distribution dramatically. <b>Conservation of utmost importance in Gauteng. HIGH RISK OF PREDATION BY EXTOIC SP.</b>
	<b>SILUROIDEI</b> <i>Chiloglanis pretoriae</i> Eng. Shortspine Rock Catlet Afr. Kortstekel-suierbekkie	<b>LEAST CONCERN</b> Least Concern <b>Endangered (to be proved)</b>	Very sensitive sp. requiring fast flowing rapids over cobble beds. Requires good quality water. Invertivorous sp.	Very important indicator sp. to the conservation endeavour. The pollution of systems has reduced the distribution dramatically. <b>Conservation of utmost importance in Gauteng.</b>
	<b>SILUROIDEI</b> <i>Clarias gariiepinus</i> Eng. Sharptooth Catfish Afr. Skerptandbarber/Barber	<b>LEAST CONCERN</b> Least Concern Least Concern (to be proved)	Dominant, hardy omnivorous catfish. Occupies a wide range of habitats excluding very fast flowing habitats. Competes with other sp.	Although this sp. should be tolerated in the conservation endeavour, should the population levels increase significantly, management plans should be taken to mitigate this dominance.

**Table 2:** List of exotic species which occur, as a result of recent surveys, occur in the Bloubankspruit. Species names, common names, general biology and or environmental requirement and possible influence to conservation endeavour listed.

PICTURE OF SPECIES	FAMILY/ORDER <i>Species</i> ( <i>English</i> Common name) ( <i>Afrikaans</i> common name)	IUCN RED DATA LISTING SA National rating Possibly provincial rating	General biology / environmental requirements	Benefits of a Bloubankspruit protected area to species.
	<p><b>SALMONIDAE</b> <i>Oncorhynchus mykiss</i> <b>Eng.</b> Rainbow Trout <b>Afr.</b> Reënboogforel</p>	<p><b>EXOTIC SP.</b> Native to North America – distributed across the world for angling purposes.</p>	<p>Aggressive predator which is sensitive to water quality alterations. Occurs in a wide variety of habitats. Requires highly oxygenated, coarse gravel/cobble beds to spawn in.</p>	<p>This sp. has known to prey on a range of small barbine, siluriform and cyprinid spp. In the Bloubankspruit a 15cm yellowfish has been removed from a +/- 1.5kg Trout. Generally out-competed by yellowfish. <b>Population management/monitoring required.</b></p>
	<p><b>CENTRARCHIDAE</b> <i>Micropterus salmoides</i> <b>Eng.</b> Largemouth Bass <b>Afr.</b> Grootbek-baars</p>	<p><b>EXOTIC SP.</b> Native to North America, introduced into SA and the world for angling purposes, supports a large angling industry in SA.</p>	<p>Aggressive, hardy, nest building predator which is intolerant of elevated flows. Poor climber of barriers.</p>	<p>This sp. has known to prey on a range of small barbine, siluriform and cyprinid spp. Widely distributed in the Bloubankspruit and surrounding catchment. River population maintained by local dam populations. Potentially dangerous sp. to the sustainability of conservation endeavour. Can be controlled using small (1.5ft) weirs which restrict movement. <b>Management and monitoring required.</b></p>
	<p><b>CYPRINIDAE</b> <i>Cyprinus carpio</i> <b>Eng.</b> Carp/King Carp/Mirror Carp <b>Afr.</b> Karp</p>	<p><b>EXOTIC SP.</b> Native to Asia and Europe. Distributed across the world as an angling sp. and as a food source for poor communities.</p>	<p>Very hardy omnivore which prefers still waters, active foraging species which causes siltation of systems. Strong swimmer.</p>	<p>This hardy species is widely distributed across South Africa and is considered to be a large threat to ecosystem structure and function in that it causes alterations in ecosystem habitats due to its feeding methods. This sp. is an affective competitor with natural sp. growing fast and generally tolerant to predation. <b>Efforts are required to manage the population of this sp. in the conservation area.</b></p>