

# Checklist of the fishes of Namibia for each wetland region

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## INTRODUCTION

Namibia's dry landscape and patchy wetlands conceal a surprisingly wide variety of fishes. All but one of the permanently flowing rivers are in the north. These are; the Zambezi river and the Kwando - Linyanti - Chobe system in Eastern Caprivi, the Kavango and Kunene Rivers. Together with the oshona in Owambo these wetlands support a large and diverse indigenous fish fauna. The Orange River in the south is also a large perennial river but the fish community is comparatively small. The intermittent westward flowing rivers of the interior, and the impoundments on them, support a fish fauna of largely introduced

or translocated indigenous species. There are, however, scattered records of a few hardy species occurring in semi-permanent pools in these rivers. The sinkholes and caves in the Karstveld area are also home to a few species of which two are endemic.

As there is no published checklist for the fish of Namibia, we have compiled one from the available literature. The fishes of each major wetland region are indicated. This list must be considered incomplete until more intensive surveys are undertaken and published, particularly of the Cunene River (see van der Waal, this volume) and the episodic westward flowing rivers and their estuaries (see Loutit, this volume).

Checklist of the fishes in Namibia for each wetland region – family, species and common name. * = present; R = rare; E = endemic; V = vulnerable; A = alien.										
Freshwater Fishes	East Caprivi	Kavango River	Cunene River	West flowing rivers	Owambo & Etosha	Bushmanland/ Kavango pans	Karstveld	State dams	Lower Orange River	Coastal wetlands
MORMYRIDAE – elephant snouts										
<i>Hippopotamyrus unsorgii</i> Slender stonebasher	*	*	*		*					
<i>Hippopotamyrus discorhynchus</i> Zambezi parrotfish	*	*								
<i>Hippopotamyrus pappenheimi</i> <i>Marcusenius macrolepidotus</i> Bulldog	*	*	*?		*					
<i>Mormyrus lacerda</i> Western bottlenose	*	*	*		*					
<i>Petrocephalus castostoma</i> Churchill	*	*	*		*					
<i>Pollimyrus castelnaui</i> Dwarf stonebasher	*	*			*					
KNERIIDAE = knerias										
<i>Kneria angolensis</i> Angola kneria			*							
<i>Kneria maydelli</i>			V							
CHARACIDAE = robbers										
<i>Brycinus humilis</i>			*							
<i>Brycinus lateralis</i> Stripped robber	*	*	*		*					
<i>Hydrocynus vittatus</i> Tiger fish	*	*	*							
<i>Micralestes acutidens</i> Silver robber	*	*	*		*					
<i>Micralestes argyrotaenia</i>			*							
<i>Rhabdalestes maunensis</i> Okavango robber	*	*	*		*					
HEPSETIDAE – pikes										
<i>Hepsetus odoe</i> African pike	*	*	*		*					
DISTICHODONTAE – citharines										
<i>Hemigrammocharax machadoi</i> Dwarf citharine	*	*	*		*					
<i>Hemigrammocharax multifasciatus</i> Multibar citharine	*	*	*		*					



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<i>Leptoglanis rotundiceps</i> spotted catlet		*								
<i>Zaireichthys</i> sp.	*	*	*							
AMPHILIIDAE – mountain catfish										
<i>Anphilius uranoscopus</i> Stargazer mountain catfish	*	*								
SCHILBEIDAE – butter catfish										
<i>Schilbe mystus</i> <small>in the middle</small> Silver catfish	*	*		*						
CLARIIDAE – common catfish										
<i>Clarias cavernicola</i> Cave catfish							E			
<i>Clarias dumerilii</i> / <i>C. liocephalus</i> Okavango catfish		*	*							
<i>Clarias gariepinus</i> Sharptooth catfish	*	*	*	*	*		*	*	*	
<i>Clarias ngamensis</i> Blunntooth catfish	*	*	*		*					
<i>Clarias stappersii</i> Blotched catfish			*		*					
<i>Clarias theodora</i> Snake catfish	*	*	*?		*					
<i>Clariallabes platyprosopus</i> Broadhead catfish	R	R								
MOCHOKIDAE – Squeakers										
<i>Chiloglanis fasciatus</i> rock catlet		*								
<i>Chiloglanis neumanni</i> Newmann's rock catlet	*		*							
<i>Synodontis leopardinus</i> Leopard squeaker	*	*			*					
<i>Synodontis macrostigma</i> Largespot squeaker	*	*	*		*					
<i>Synodontis nigromaculatus</i> Spotted squeaker	*	*								
<i>Synodontis woosnami</i> Upper Zambezi squeaker	*	*	*		*					
<i>Synodontis</i> sp. no. v 1 ( <i>S. macrostoma</i> )			*							
<i>Synodontis</i> sp. nov. 2 ( <i>S. vanderwaali</i> )			*							
CYPRINODONTIDAE – topminnows										
<i>Aplocheilichthys hutereaui</i> Mesh-scaled topminnow	*	*								
<i>Aplocheilichthys johnstonii</i> Johnson's topminnow	*	*	*		*					
<i>Aplocheilichthys katangae</i> Striped topminnow	*	*	*							
<i>Aplocheilichthys macrurus</i> Lampeye			*		*					
<i>Notobranchius</i> sp. Striped killifish	E									
POECILIIDAE										
<i>Poecilia reticulata</i> <i>Xiphophorus helleri</i>							A A			
CENTRACHIDAE – bass										
<i>Micropterus salmoides</i> Largemouth bass								A		
CICHLIDAE – cichlids – bream										
<i>Hemichromis elongatus</i> Barred jewel fish		*								
<i>Oreochromis andersonii</i> Threespot tilapia	*	*	*		**					
<i>Oreochromis macrochir</i> Green-headed tilapia	*	*	*		*			*		

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<i>Oreochromis mossambicus</i> Mocambique tilapia							*	*	*	
<del>Pharyngochromis darlingi</del> Zambezi happy	*	*	*	*	*					
<del>Pseudocrenilabrus philander</del> Southern mouthbrooder	*	*	*		*		*		*	
<del>Serranochromis (Sargochromis) carlottae</del> Rainbow happy	*	*								
<del>Serranochromis (Sargochromis) codringtonii</del> Green happy	*	*			*					
<del>Serranochromis (Sargochromis) coulteri</del> <del>Serranochromis (Sargochromis) giardi</del> Pink happy	*	*	*		*					
<del>Serranochromis (Sargochromis) greenwoodi</del> <i>Serranochromis angusticeps</i> Thinface largemouth	*	*	*		*					
<i>Serranochromis longimanus</i> Longfin largemouth	*									
<del>Serranochromis macrocephalus</del> Purple face largemouth	*	*	*		*					
<del>Serranochromis robustus jallae</del> Nembwe	*	*	*		*					
<i>Serranochromis thumbergi</i> Brownspot largemouth	*	*	*		*					
<i>Tilapia guinasana</i> Otjikoto tilapia							E			
<del>Tilapia rendalli rendalli</del> Northern redbreast bream	*	*	*		*			*		
<del>Tilapia ruweti</del> Okavango tilapia	*	*								
<del>Tilapia sparrmanii</del> Banded tilapia	*	*	*		*			*	*	
<i>Thorachromis buysi</i> <i>Throchromis albolabris</i> <i>Orthochromis machadoi</i>			*		*					
ANABANTIDAE – climbing perches										
<del>Ctenopoma intermedium</del> Dwarf climbing perch	*	*								
<del>Ctenopoma multispinis</del> Many-spined climbing perch	*	*								
MATACEMBELIDAE – spiny eels										
<del>Aethiomastacembalus frenatus</del> Longtailed spiny eel	*	*								
<i>Aethiomastacembalus vanderwaali</i> Ocellated spiny eel	R	R								
ESTUARINE AND MARINE FISH										
HEXANCHIDAE – cow sharks										
<i>Notorynchus cepedianus</i> Broad nose sevengill shark										*
CARCHARHINIDAE – requiem sharks										
<i>Carcharhinus brachyurus</i> Copper shark										*
<i>Mustelus mustelus</i> Smooth-hound										*
<i>Mustelus palumbes</i> White spotted smooth-hound										*
<i>Triakis megalopterus</i> Spotted gullyshark										*
ALOPTIIDAE – thresher sharks										
<i>Alopias superciliosus</i> Bigeye thresher										*

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Estuarine and Marine Fish	East Caprivi	Kavango River	Cunene River	West flowing rivers	Owambo & Etosha	Bushmanland/ Kavango pans	Karstveld	State dams	Lower Orange River	Coastal wetlands
POLYNEMIDAE <i>Polydactylus</i> sp. Threadfin										*
ATHERINIDAE – silversides <i>Hepsetia breviceps</i> Cape silverside				*						
GOBIIDAE – gobies  <i>Awaous guineensis</i> <i>Gabionellus lepturus</i> <i>Nematogobius ansorgei</i>			*							*
ELEOTRIDAE – sleepers  <i>Eleotris vittata</i> <i>Batanga lehretonis</i>			*							*
SCOMBRIDAE <i>Scomber japonicus</i> Mackerel										*

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## REFERENCES

- BETHUNE, S. & SKELTON, P. H. 1984. The potential introduction of alien fish via the Eastern National Water Carrier. Unpublished paper presented at the Directorate of Nature Conservation and Recreation Resorts Annual Research Meeting on the utilisation of renewable natural resources with emphasis on the ecology of biological invasion.
- BETHUNE, S. 1991. Kavango River wetlands. In: Simmons, R.E., Brown, C.J. & Griffin, M. (Eds.). Status and Conservation of wetlands in Namibia. *Madoqua* 17: 77-112.
- BROWN, C.J., GRIFFIN, M., CHANNING, A., & BETHUNE, S. In Prep. Checklist of the higher vertebrates in Namibia and an evaluation of their biotic diversity contained within conservation areas.
- CAMBRAY, J. A. 1984. Fish populations in the middle and lower Orange River with special reference to the effects of stream regulation. *J. Limnol. Soc. sth. Afr.* 10: 37-49.
- DIXON, J. E. W. & BLOM, M. J. 1974. Some aquatic vertebrates from the Namib Desert, South West Africa. *Madoqua* 3: 31-32.
- HOLTZHAUSEN, J. A. 1991. Freshwater fishes of wetlands in Namibia. In: Simmons, R.E., Brown, C.J. & Griffin, M. (Eds.). Status and conservation of wetlands in Namibia. *Madoqua* 17: 189-191.
- JACKSON, P. B. N. 1975. Common and scientific names of the fishes of Southern Africa Part II. Freshwater fishes. Special Publication of the J.L.B. Smith Institute of Ichthyology, Rhodes University, 14.
- PENRITH, M. J. 1982. Additions to the checklist of Southern African Freshwater Fishes and a gazetteer of the south-western Angolan collecting localities. *J. Limnol. Soc. sth. Afr.* 8: 71-75.
- SKELTON, P. H. 1987. South African Red Data Book - Fishes. South Africa National Scientific Programmes Report 137. Pretoria: C.S.I.R.
- SKELTON, P. H. 1988. Freshwater fishes of South West Africa. *Roan News* 1/88: 1-5.
- SKELTON, P. H. In prep. Checklist of the fishes in the Kunene River.
- SKELTON, P. H. & CAMBRAY, J. A. 1981. The freshwater fishes of the mid and lower Orange River. *Koedoe* 24: 51-66.
- SKELTON, P. H. & MERRON, G. S. 1984. The fishes of the Okavango River in South West Africa with reference to the possible impact of the Eastern National Water Carrier on fish distribution. Investigation Report 9. J.L.B. Smith Institute of Ichthyology, Grahamstown.
- SKELTON, P. H. & MERRON, G. S. 1985. A second survey of the fishes of the Okavango River in South West Africa with reference to the possible impact of the Eastern National Water Carrier. Investigation Report 14. J.L.B. Smith Institute of Ichthyology, Grahamstown.
- SKELTON, P. H., BRUTON, M. N., MERRON, G. S. & VAN DER WAAL, B. C. W. The fishes of the Okavango drainage system in Angola, South West Africa and Botswana: Taxonomy and distribution. *Ichthyol. Bull. J.L.B. Smith Inst.* 50.
- SKELTON, P. H. & MERRON, G. S. 1987. A third survey of the fishes of the Okavango River in South West Africa, with reference to the possible impact of the Eastern National

- Water Carrier. Investigational Report 4. J.L.B. Smith Institute of Ichthyology, Grahamstown.
- VAN DER WAAL, B. C. W. 1991. Fish life of the oshona delta in Owambo, Namibia, and the translocation of *Cunene* species. In: Simmons, R.E., Brown, C.J. & Griffin, M. (Eds.). Status and conservation of wetlands in Namibia. *Madoqua* 17: 201-209.
- VAN DER WAAL, B.C.W. 1991. A survey of the fisheries in Kavango, Namibia. In: Simmons, R.E., Brown, C.J. & Griffin, M. (Eds.). Status and conservation of wetlands in Namibia. *Madoqua* 17: 113-122.
- VAN DER WAAL, B.C.W. & SKELTON, P.H. 1984. Checklist of the fishes of Caprivi. *Madoqua* 13: 303-320.