

PROVISIONAL INVENTORY OF NATIVE FISHES FROM HONG KONG FRESH WATERS

This list has been updated from Chong & Dudgeon (1992) and Bosco P.L. Chan & Dudgeon (2001 unpublished); see also the [AFCD checklist](#). Fishes that are confined to brackish water and marine vagrants that occasionally swim up local streams (clupeids, engraulids, plotosids, ambassids, gerreids, siganids etc.) have been excluded, as have aquacultured and non-native (i.e. introduced) species (but see checklist by Jeffery C.F. Chan *et al.*, 2022 – currently, under review).

Megalopidae

Megalops cyprinoides (enters streams but primarily estuarine or marine)

Anguillidae

Anguilla japonica (globally threatened by overexploitation)

Anguilla marmorata

Ophichthidae

Pisodonophis boro (regularly enters fresh water but is mainly confined to tidally influenced reaches; *P. cancrivorous* also occurs locally but is primarily estuarine or marine)

CYPRINIDAE

Acrossocheilus beijiangensis

Acrossocheilus parallens (possibly a third species locally)

Aphyocypris lini (= *A. pooni*; locally extinct; most reliable record is the original description in 1939)

Aphyocypris normalis (formerly placed in *Nicholsicypris*; occurs in Dongjiang; may have been confused with *Yaoshanicus* – now *Aphyocypris - arcus*)

Barbodes semifasciolatus (at various times placed in *Capoeta* or *Puntius*)

Garra orientalis (possibly extinct; only one recent record from Kau Lung Hang Lo Wai, Plover Cove Reservoir, and Tai Lam Chung Reservoir, which may represent introductions)

Hemiculter leucisculus (reservoirs and large lowland rivers in northern New Territories only, probably introduced from China)

Metzia formosae (formerly placed in *Rasborinus*; *M. fanlingensis* is a junior synonym)

Metzia lineata (formerly placed in *Rasborinus*)

Opsariichthys sp. (possibly *O. evolans*; formerly referred to as ‘*Zacco playtpus*’; there may be an additional HK species in this genus)

Parazacco spilurus (may be a second cryptic species locally)

Pseudorasbora parva

Rasbora steineri

Rhodeus ocellatus

Tanichthys albonubes (locally extinct; global assessment [Data Deficient] needs update)

Cobitidae

Cobitis sinensis (no recent accounts; unconfirmed historic records only)

Misgurnus anguillicaudatus

Balitoridae

Liniparhomaloptera disparis

Gastromyzontidae

Pseudogastromyzon myersi

Nemacheilidae

Oreonectes platycephalus

Schistura fasciolata (possibly *Schistura hingi*, needs verification)

Schistura incerta (there may be an additional species of *Schistura* in HK)

Sisoridae

Glyptothorax pallozonus

Siluridae

Pterocryptis anomala (previously referred to as *Silurus cochinchinensis*)

Silurus asotus

Clariidae

Clarias fuscus

Bagridae

Tachysurus trilineatus (formerly placed in *Pseudobagrus*)

Plecoglossidae

Plecoglossus altivelis

Mugilidae

Mugil cephalus

Planiliza subviridis

Adrianichthyidae

Oryzias curvinotus

Syngnathidae

Hippichthys spicifer (Rarely in streams, mostly in estuaries)

Synbranchidae

Monopterus albus (plus at least one other species yet to be described)

Mastacembelidae

Mastacembelus armatus

Lateolabracidae

Lateolabrax lyuy (= *maculatus* and is distinct from *L. japonicus*; juveniles may ascend streams)

Lutjanidae

Lutjanus argentimaculatus (juveniles often in coastal streams, but mostly in mangroves)

Kuhliidae

Kuhlia marginata

Kuhlia rupestris

Rhyacichthyidae

Rhyacichthys aspro (amphidromous)

Eleotridae

Butis melanostigma (formerly misidentified as *B. butis* [?]; frequent in brackish water)

Eleotris acanthopoma (more often in freshwater than estuaries)

Eleotris fusca (more often in estuaries than freshwater)

Eleotris melanosoma (more often in estuaries than freshwater)

Eleotris oxycephala (more often in freshwater than estuaries; penetrates further upstream than other Hong Kong eleotrids)

Giuris tolsoni (formerly misidentified as *G. margaritacea* that occurs further south)

Hypseleotris cyprinoides

Gobiidae

Awaous melanocephalus

Awaous ocellaris

Glossogobius giuris

Glossogobius olivaceus

Gobiopterus cf. *macrolepis* (identity to be confirmed)

Mugilogobius abei

Mugilogobius chulae

Mugilogobius myxodermus

Redigobius cf. *bikolanus*

Rhinogobius duospilus

Rhinogobius leavelli (may have been confused with *R. giurinus*; local records of *R. cervisquamotus* also represent *R. leavelli*)

Rhinogobius similis (has amphidromous and landlocked populations)

Sicyopterus longifilis

Stiphodon atropurpureus

Stiphodon imperorientis

Stiphodon multisquamus

Stiphodon palawanensis

Stiphodon percnopterygionus

Tridentiger trigonocephalus

Osphronemidae

Macropodus hongkongensis

Macropodus opercularis

Channidae

Channa asiatica

Channa maculata (feral populations in large rivers and reservoirs; mercy releases?)

Tetraodontidae

Takifugu ocellatus (anadromous)

INVENTORY OF AMPHIBIANS FROM HONG KONG FRESH WATERS

This list reflects the efforts of local herpetologists (in particular Anthony Bogadek, Michael W.M. Lau and John D. Romer) over several decades and, leaving aside the possibility of any new discoveries, can be regarded as definitive. An illustrated and annotated guide to the 24 native amphibian species (coordinated by Billy C.H. Hau) is available [here](#).

Caudata

Salamandridae: Pleurodelinae

Paramesotriton hongkongensis (HK and neighbouring Guangdong only; globally Near Threatened)

Anura

Megophryidae

Boulenophrys (formerly *Megophrys*) *brachykolos* (widely distributed in southern China and northern Vietnam; conservation status needs to be updated)

Leptobranchella laui (HK and neighbouring Guangdong only)

Eleutherodactylidae

Eleutherodactylus planirostris (invasive, well established locally; highly terrestrial – a direct developer, tadpole stage passed inside eggs deposited in damp locations)

Bufonidae

Duttaphrynus (formerly *Bufo*) *melanostictus*

Microhylidae

Kalophrynus interlineatus

Kaloula pulchra

Microhyla butleri

Microhyla fissipes

Microhyla pulchra

Dicroglossidae (formerly included within Ranidae)

Fejervarya multistriata

Hoplobatrachus chinensis (farmed in China and Thailand, but populations in HK declining, and some individuals may be mercy releases)

Limnonectes fujianensis

Occidozyga lima (locally extinct due to loss of paddy fields and marshes, but a population introduced from the aquarium trade is thriving at Shui Hau marsh)

Quasipaa exilispinosa

Quasipaa spinosa (globally Vulnerable highland frog; threatened by overexploitation)

Ranidae

Amolops hongkongensis (HK and neighbouring Guangdong only; globally Endangered)

Amolops albispinus

'*Hylarana*' *latouchii* (sometimes treated as *Rana*; definitive assignment pending)

Hylarana macrodactyla

Hylarana taipehensis

Lithobates catesbeianus (specimens of this American bullfrog, which is farmed in China, sometimes encountered locally; likely mercy releases, no evidence of breeding)

Odorrana chloronota

Sylvirana guentheri

Rhacophoridae

Liuixalus romeri (formerly placed in *Philautus* then in *Chirixalus*; HK endemic, globally Endangered, but some success with captive breeding and reintroductions)

Polypedates megacephalus

INVENTORY OF REPTILES FROM HONG KONG FRESH WATERS

As with the amphibians, the diligent work of local herpetologists ensures that this list can be regarded as more-or-less definitive. It includes some species that are semiaquatic but seldom found far from water, and also takes account of introduced species although a more comprehensive review of introduced turtles (including hybrids) is given by Sung *et al.* (2021) An illustrated and annotated guide to all reptiles in Hong Kong (coordinated by Billy C.H. Hau) is available [here](#); additional information on local snakes can be found at <https://www.hongkongsnakeid.com/>.

Testudines

Platysternidae

Platysternon megacephalum (Critically Endangered, remnant HK population of global significance, but illegal exploitation continues)

Geoemydidae (formerly Bataguridae)

Cuora flavomarginata (probably introduced, relatively terrestrial turtle that is globally Endangered; non-native *C. amboinensis* recorded occasionally)

Cuora trifasciata (Critically Endangered, remnant HK population of global significance; upland forest streams)

Mauremys (formerly *Chinemys*) *reevesii* (lowland species; globally Endangered, but not assessed for over a decade; HK population *might* originate from introduced animals as appears to be the case in Taiwan)

Mauremys sinensis (frequently traded; introduced via releases or escapes; *M. mutica* has been reported also)

Ocadia sinensis (a few records of released individuals)

Sacalia bealei (Critically Endangered, remaining local populations subject to exploitation; non-native *S. quadriocellata* are sometimes encountered)

Trachemys scripta elegans (widespread invasive, mercy releases frequent; seems to displace *Mauremys reevesii*; *T.s. scripta* has also been encountered in field surveys in HK but is relatively rare)

Chelydridae

Chelydra serpentina (local records may be released pets, but this North American turtle is farmed for its meat in China)

Trionychidae

Palea steindachneri (local records probably represent introduced individuals)

Pelodiscus sinensis (lowlands only; most local records may be feral market animals; wild populations assessed as globally Vulnerable)

Squamata; Lacertilia

Agamidae

Physignathus cocincinus (semiaquatic along stream riparia; escaped or released pets probable source of introduced populations in HK; globally Vulnerable due to overexploitation)

Scincidae

Tropidophorus sinicus (common and widespread along streams)

Varanidae

Varanus salvator (extinct locally, but present in Guangxi and Hainan; occasional sightings likely escapes/releases as the water monitor is widely traded)

Squamata: Serpentes

Elapidae (not aquatic, but these species are frequent in proximity to water and swim readily)

Bungarus fasciatus(

Bungarus multicinctus

Naja atra

Ophiophagus hannah

Homalopsidae

Enhydris chinensis (lowland fresh waters and fish ponds)

Enhydris plumbea (shallow lowland fresh waters; *E. bennetti* associated with mangroves and tidal areas)

Colubridae

Amphiesma stolatum (marshes and lowland streams; rare)

Fowlea flavipunctatus (marshes and lowland streams; common)

Hebius boulengeri (high elevation stream species; very rare)

Opisthotropis andersoni (small streams in highland forest; common)

Opisthotropis kuatunensis (upland forest streams)

Opisthotropis lateralis (low gradient forest streams)

Rhabdophis subminiatus (not aquatic, but frequent in proximity to water and swims readily; eats frogs, tadpoles and fishes)

Trimerodytes aequifasciata (larger stony streams in forest)

Trimerodytes balteata (lowland stream species; rare)

Trimerodytes percarinata (subsp. *pericarinata*; highland streams)

Pythonidae

Python bivittatus (not aquatic, but frequent in proximity to water and swims readily)
