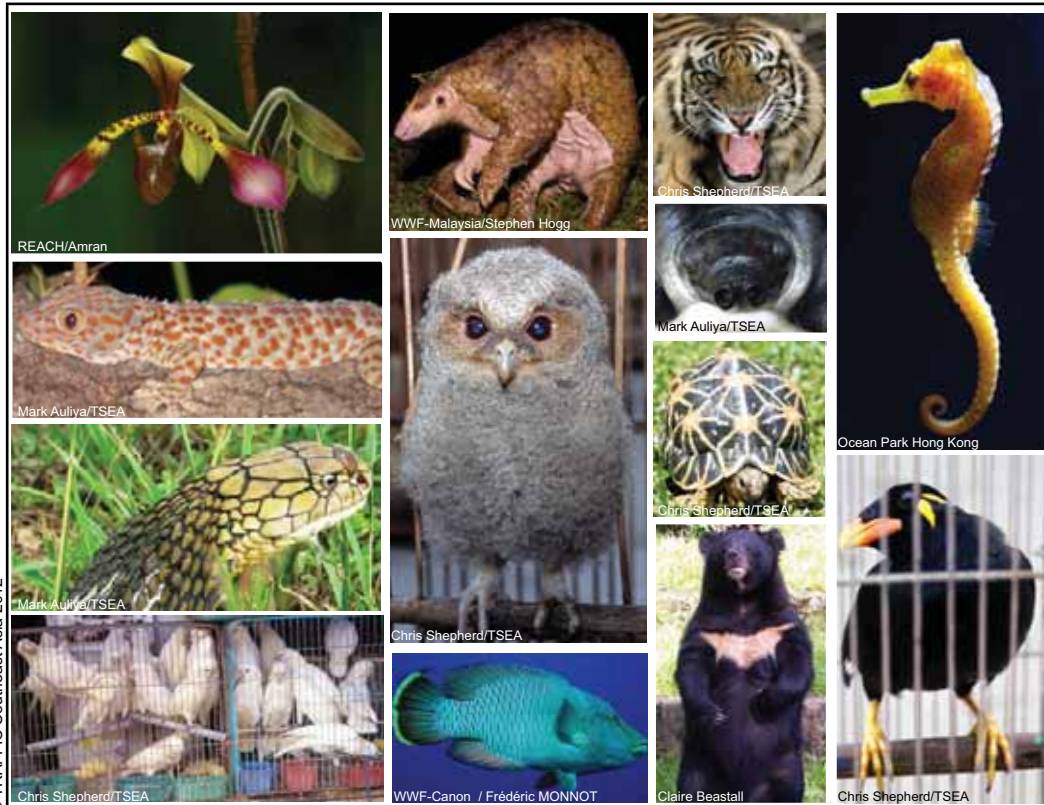


IDENTIFICATION SHEETS FOR WILDLIFE SPECIES TRADED IN SOUTHEAST ASIA

Singapore



Contents (1)

These identification sheets have been prepared by TRAFFIC Southeast Asia to assist enforcement officials in the identification of wildlife species that are commonly found in trade in Southeast Asia. These were prepared between 2008 and 2011 and feature **98** sheets.

RESOURCES

CITES and the IUCN Red List
CITES Management and Scientific Authorities
Guide to Verification of CITES Permits
Measurements and Glossary
Common Smuggling Techniques - On the Person
Common Smuggling Techniques - Hidden in Luggage
Common Smuggling Techniques - Hidden in Cargo
Common Smuggling Techniques - Mixed with Lookalike Species
Common Smuggling Techniques - Under the Guise of Captive Breeding
Detecting Fraudulent Permits
Situations where Fraudulent Permits are often Found

MAMMALS

Bos gaurus & *Bos javanicus* Gaur and Banteng
Capricornis Serows
Pantholops hodgsonii Tibetan Antelope - Shatoosh
Saiga tatarica Saiga Antelope
Deer and Antlers Multi-tined Antlers
Moschus spp. Musk Deer
Felidae (1) Cats
Felidae (2) Southeast Asian CITES I Cats
Felidae (3) Parts & Derivatives commonly found in Trade
Southeast Asian Otters Southeast Asian Otters
Helarctos malayanus Sun Bear
Ursus thibetanus Asiatic Black Bear
Hemigalus derbyanus & *Chrotogale owstoni* Banded Palm Civet & Owston's Civet
Prionodon pardicolor & *Prionodon linsang* Spotted Linsang & Banded Linsang
Arctictis binturong Binturong
Rhinocerotidae Rhinoceros
Manis Pangolins
Primates Primates
Nycticebus Lorises
Macaca fascicularis Long-tailed Macaque
Elephas maximus & *Loxodonta africana* Elephants

BIRDS

Dendrocygna javanica & *D. arcuata* Lesser Whistling & Wandering Whistling Ducks
Leptoptilos Adjutant Storks
Bucerotidiformes Hornbills
Copsychus malbaricus White-rumped Shama
Falconiformes Birds of Prey
Pycnonotus zeylanicus Straw-headed Bulbul
Gracula religiosa Hill Mynah
Psittaciformes Parrots
Cacatua White Cockatoos
Probosciger aterrimus Palm Cockatoo
Eos Indonesian Lorikeets
Loriculus galgulus Blue-crowned Hanging Parrot
Lorius garrulus Chattering Lory
Lorius lory Black-capped Lory
Strigiformes Owls

Contents (2)

REPTILES

Crocodylia	Hides (Crocodile Hides)
Alligators & Caiman	Alligators & Caimans
<i>Crocodylus novaeguinea</i> & <i>C. mindorensis</i>	Philippine & New Guinea Crocodiles
<i>Crocodylus porosus</i> & <i>C. siamensis</i>	Estuarine & Siamese Crocodiles
<i>Tomistoma schlegelii</i>	False Gharial
<i>Uromastyx</i>	Spiny-tailed Lizards
<i>Phelsuma</i>	Day Geckos
<i>Gekko gekko</i>	Tokay Gecko
<i>Varanus</i>	Monitor Lizards
<i>Ptyas mucosus</i>	Oriental Rat Snake
<i>Ophiophagus hannah</i> , <i>Naja</i>	Cobras
Pythons	Pythons
<i>Carettochelys insculpta</i>	Pig-nosed Turtle
<i>Chelus fimbriatus</i>	Matamata Turtle
Cheloniidae and Dermochelyidae	Marine Turtles
<i>Eretmochelys imbricata</i>	Hawksbill Turtle
<i>Batagur</i>	River Terrapins
<i>Geoclemys hamiltonii</i>	Black Pond Turtle
<i>Cuora</i>	Asian Box Turtles
<i>Leucocephalon yuwonoi</i>	Sulawesi Forest Turtle
<i>Platysternon megacephalum</i>	Big-headed Turtle
<i>Orlitia borneensis</i>	Malaysian Giant Turtle
<i>Siebenrockiella leytensis</i>	Philippine Forest Turtle
<i>Trachemys scripta elegans</i>	Red-eared Slider
Testudinidae	Tortoises
<i>Astrochelys (Geochelone) radiata</i>	Radiated Tortoise
<i>Astrochelys yniphora</i>	Ploughshare Tortoise
<i>Chelonoides (Geochelone) carbonaria</i>	Red-footed Tortoise
<i>Geochelone elegans</i>	Indian Star Tortoise
<i>Geochelone platynota</i>	Burmese Star Tortoise
<i>Geochelone (Stigomochelys) pardalis</i>	Leopard Tortoise
<i>Geochelone (Centrochelys) sulcata</i>	African Spurred Tortoise
<i>Indotestudo elongata</i>	Yellow-headed Tortoise
<i>Malacochersus tornieri</i>	Pancake Tortoise
<i>Manouria emys</i>	Asian Brown Tortoise
<i>Manouria impressa</i>	Impressed Tortoise
<i>Amyda cartilaginea</i>	Asiatic Softshell Turtle
<i>Chitra</i>	Narrow-headed Softshell Turtles
<i>Pelochelys</i>	Giant Softshell Turtle
<i>Pelodiscus sinensis</i>	Chinese Softshell Turtle

AMPHIBIANS

<i>Dyscophus antongilii</i>	Tomato Frog
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FISH

<i>Scleropages formosus</i>	Asian Arowana
<i>Cheilinus undulatus</i>	Humphead Wrasse
<i>Hippocampus</i>	Seahorses

INVERTEBRATES

Tridacnidae	Giant Clams
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PLANTS

Nepenthaceae	Pitcher Plants
Orchidaeeae (1)	CITES Appendix I Orchids
Orchidaeeae (2)	Identification of Wild Orchids
<i>Gonystylus</i> spp.	Ramin

CITES & The IUCN Red List

CITES

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments (member States). It aims to ensure that international trade in specimens of wild animals and plants (or their parts and derivatives ie. anything made from even parts of them) does not threaten their survival.

CITES works by subjecting the international trade in specimens of selected species to certain controls. All import, export, re-export and introduction of any of the 30,000 species covered by the Convention has to be authorised through a licencing system. Animals and plants listed under CITES appear within one of three Appendices meaning that their trade is tightly regulated through a standardised permit system:

Appendix I includes species threatened with extinction. Trade in these is allowed only in exceptional circumstances.

Appendix II includes species in which uncontrolled trade could threaten their survival. These species are not necessarily threatened at the current time.

Appendix III contains species which are protected in at least one country that has requested other member States for help in controlling the trade.

A specimen of a CITES-listed species can only be imported into or exported (or re-exported) out of a member State if the appropriate documents have been obtained in advance and are presented for clearance at the port of entry or exit. In some cases your national law may be stricter and it is this which should be applied in such cases.

Further information is available at www.cites.org

IUCN Red List

For over 40 years the IUCN has through its Species Survival Commission (SSC) been assessing the conservation status of species, subspecies, varieties and even selected subpopulations on a global scale to highlight those which are threatened with extinction.

The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information for animals and plants that have been evaluated. The assigned Categories and Criteria are designed to determine the relative risk of extinction.

Species listed CR (Critically Endangered), EN (Endangered) and VU (Vulnerable) have a higher risk of global extinction than those listed as NT (Near Threatened) or LC (Least Concern).

More information is available at www.redlist.org

There is no formal link between CITES and the IUCN Red List.

CITES: determines which procedures are followed with respect to international trade in listed animals and plants.

IUCN Red List: determines biological status of animals and plants.

CITES Management and Scientific Authorities

CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction of the species covered by the Convention has to be authorised by a licensing system. Each country which is party to CITES must designate one or more Management Authorities to be in charge of administering that licensing system and one or more Scientific Authorities who advise them on the effects of trade on the status of the species.

MANAGEMENT AUTHORITY

Agri-Food and Veterinary Authority (AVA),
Ministry of National Development,
5 Maxwell Road #02-03,
Tower Block MND Complex,
SINGAPORE 069100

Tel: +65 6227 0670
Fax: +65 6227 6403
Web: <http://www.ava.gov.sg>

SCIENTIFIC AUTHORITY

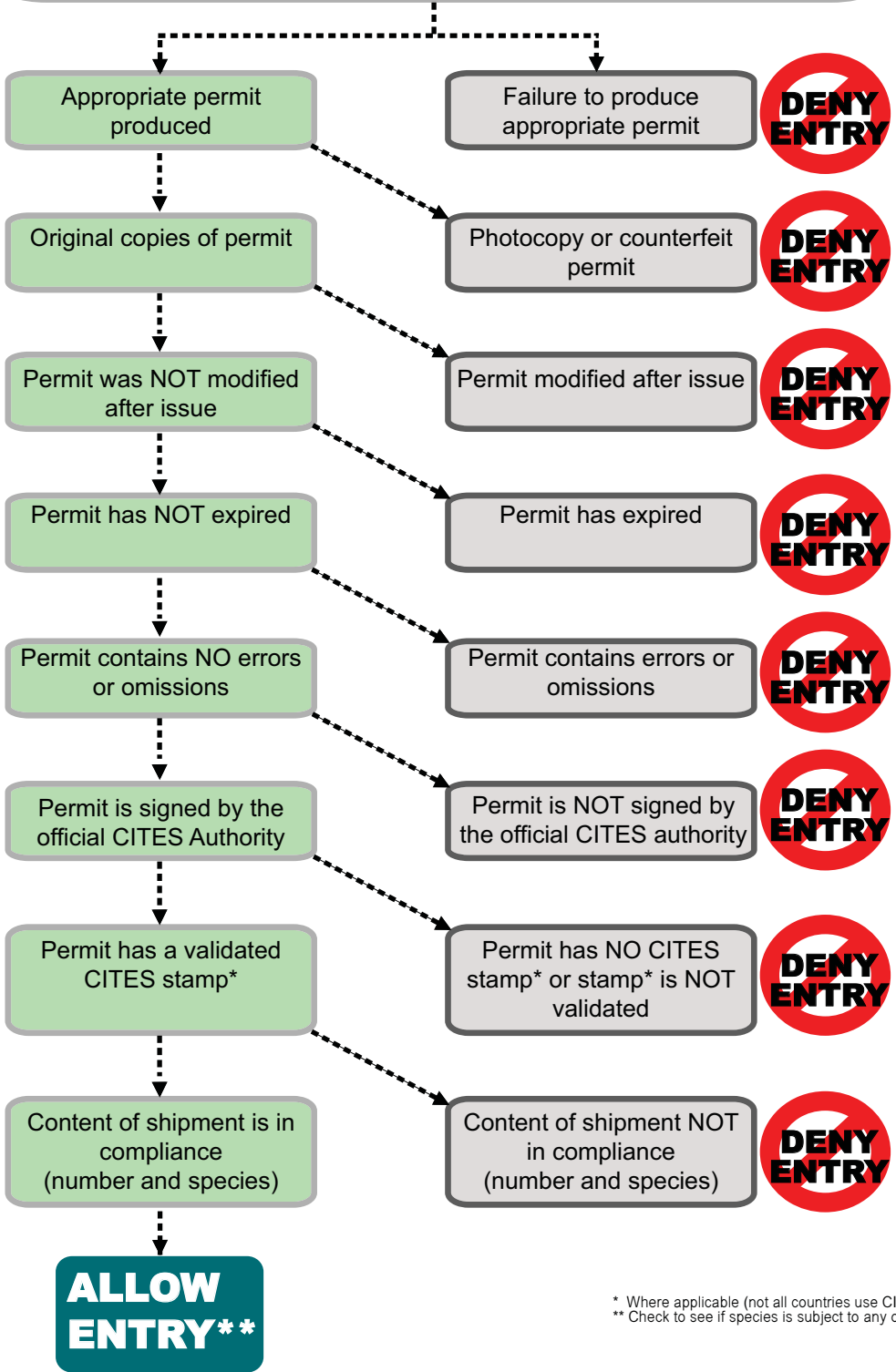
Agri-Food and Veterinary Authority (AVA),
Ministry of National Development,
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Tower Block MND Complex,
SINGAPORE 069100

Tel: +65 6227 0670
Fax: +65 6227 6403
Web: <http://www.ava.gov.sg>

GUIDE TO VERIFICATION OF CITES PERMITS

CITES permit accompanying shipment

APPENDIX I
Export permit or re-export certificate and import permit
APPENDIX II
Export permit or re-export certificate
APPENDIX III
Export permit or certificate of origin

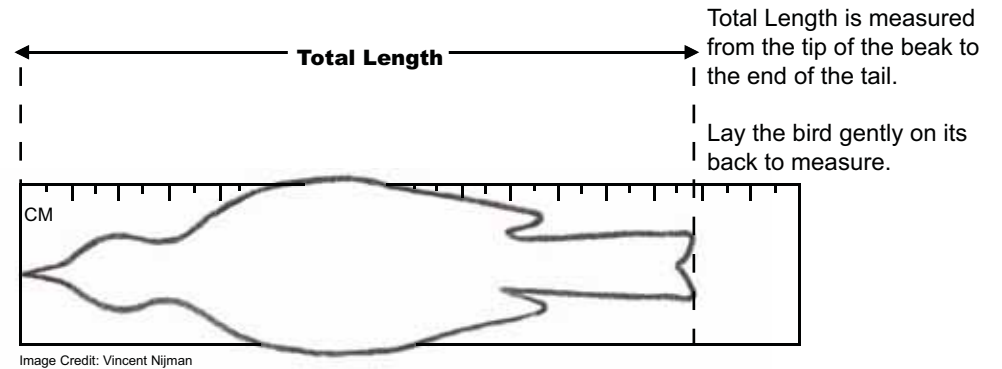
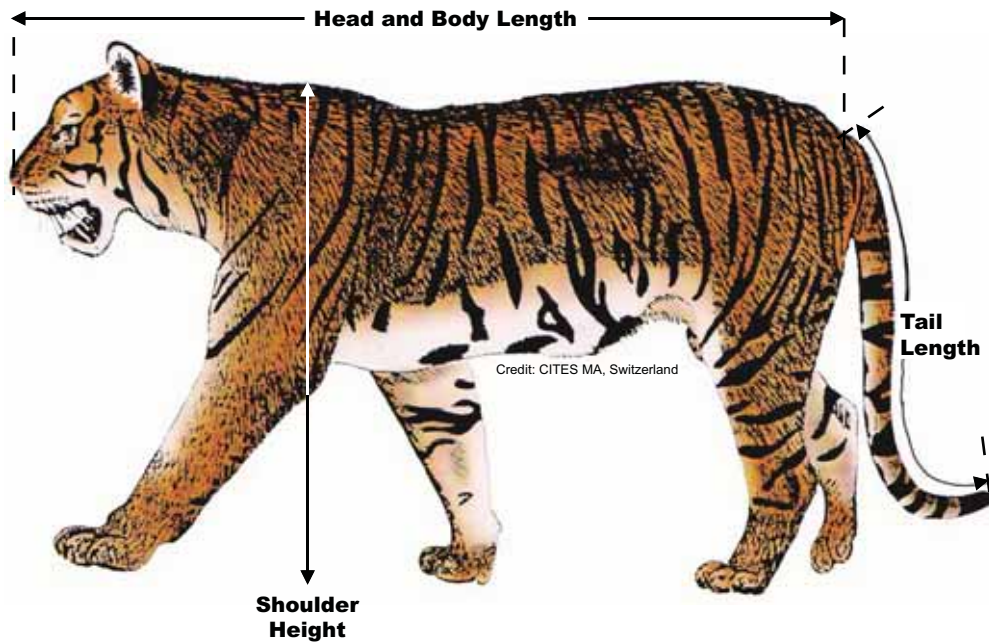


Adapted from Environment Canada

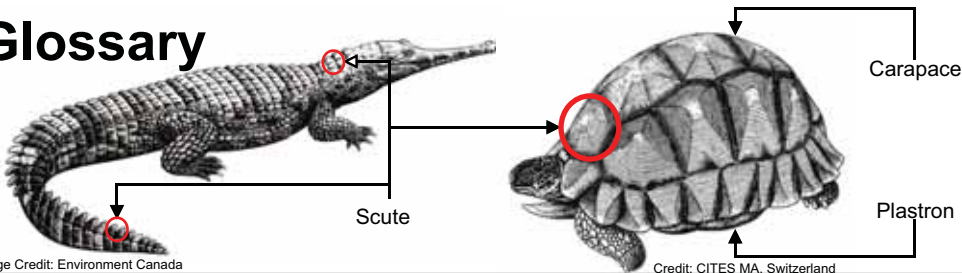
* Where applicable (not all countries use CITES stamps)
** Check to see if species is subject to any other form of control

Measurements and Glossary

Measurements



Glossary



Scute:

Horny or bony external plate, scale on a crocodile or the shell of a turtle

Carapace:

Top part of a turtle's shell, covering its back. Usually covered with scutes (scales) or soft skin

Plastron:

Bottom part of a turtle's shell, covering its stomach.

Bos gaurus (now B. frontalis) - Gaur and Bos javanicus - Banteng

Gaur

Other Names: Seladang (Malaysia), Pyoung (Myanmar)

Distribution: Bangladesh; Bhutan; Cambodia; India; Lao PDR; Malaysia; Myanmar; Nepal; Thailand; Viet Nam

Physical Characteristics: Height at shoulder: 165 - 220cm, Head and Body Length: 250 - 330cm, Tail Length: 70 - 105cm, Weight: 650 - 1,000kg

Banteng

Other Names: Tsaine (Myanmar)

Distribution: Cambodia; Indonesia; Lao PDR; Malaysia; Myanmar; Thailand; Viet Nam

Physical Characteristics: Height at Shoulder: 120 - 190cm, Head and Body Length: 180 - 225cm, Tail Length: 65 - 70cm, Weight: 400 - 900kg

International Conservation Status:

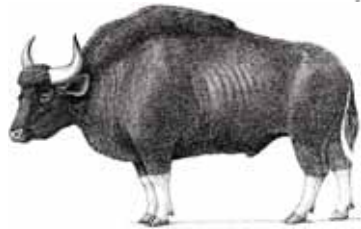
Gaur: CITES Appendix I

IUCN: Gaur VU; Banteng EN

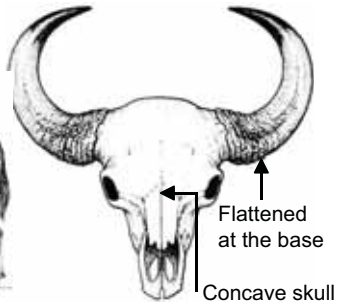
National Protection in Singapore: Endangered Species (Import and Export) Act, 2006

Distinguishing Features:

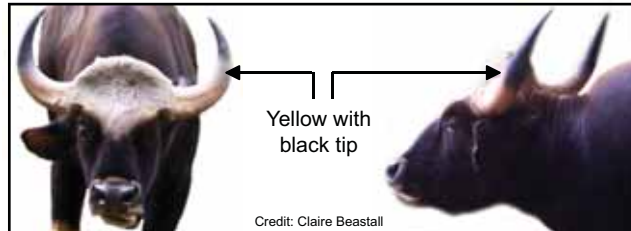
Bos gaurus (B. frontalis) - Gaur



Body deep brown, black or grey.
Lower legs white.

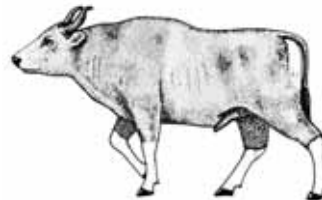


Horn Length: ≤95cm
Horn Circumference: ≤56cm

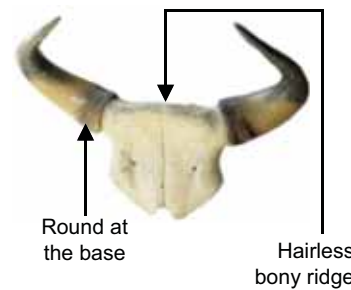


Credit: Claire Beastall

Bos javanicus - Banteng



Body dark brown to black (male),
light brown (female).
Lower legs and rump white.



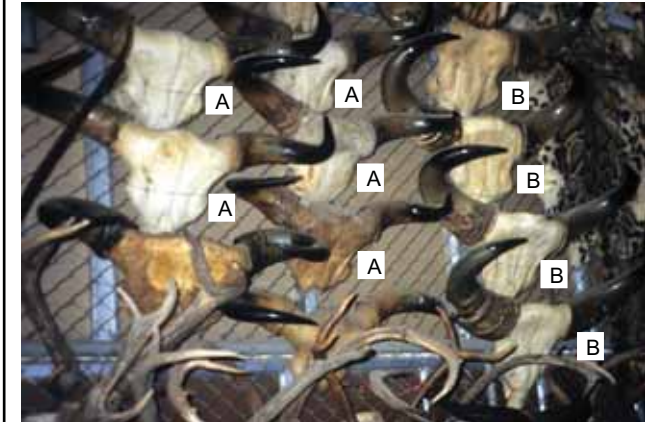
Round at the base
Hairless bony ridge



Juvenile Male Banteng
Credit: Mark Auliyal/TSEA

Horn Length: ≤87cm
Horn Circumference: ≤48cm

Traded as: As horns and skulls, meat.



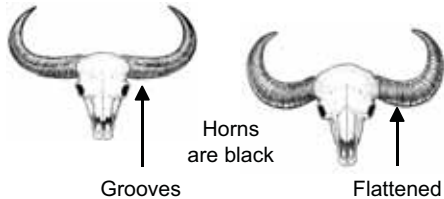
Horns on sale
Credit: TRAFFIC SEA

A: Banteng Horns

B: Gaur Horns

Similar to:

Bubalus arnee - Water Buffalo



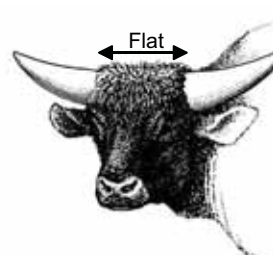
Horns are black

Grooves

Flattened

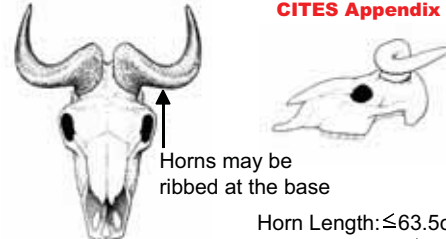
Horn Length: ≤149cm,
Horn Circumference: ≤58cm

Bos taurus - Domestic Cow



Flat

Budorcas taxicolor - Takin
CITES Appendix II



Horns may be
ribbed at the base

Horn Length: ≤63.5cm,
Horn Circumference: ≤33cm



Banteng Horns on sale
Credit: TRAFFIC SEA

Gaur Horns on sale
Credit: TRAFFIC SEA

Capricornis spp. - Serow spp.

Serow

Other Names: Kambing Gurun (Malaysia), Taw sai (Myanmar)

Distribution: Bangladesh; Bhutan; Cambodia; China; India; Indonesia (Sumatra); Japan; Lao PDR; Malaysia; Myanmar; Nepal; Taiwan; Thailand; Viet Nam

Physical Characteristics: Head and body length: 140 - 155cm; Shoulder Height: 85 - 94cm; Tail length: 11 - 16cm; Horn Length: 15 - 25.5cm

International Conservation Status:

All *Capricornis* species listed in: **CITES Appendix I**, (except *C. crispus* - Japanese Serow and *C. swinhoei* - Formosan/Taiwanese Serow)

IUCN: Varies **LR - VU** (not all listed)

National Protection in Singapore: Endangered Species (Import and Export) Act, 2006



Credit: Claire Beasall

Distinguishing Features:



Credit: Claire Beasall



Credit: Claire Beasall



Credit: Chris Shepherd /TSEA

Obvious gland under the each eye

- Long ears,
- Short neck, thick, stiff mane from the crown to the shoulders (may be brown or white in colour).
- Coat is coarse and varies in colour: brown-greyish-black, reddish
- Underparts may be lighter

Similar to:

Naemorhedus spp. - Goral spp.

All listed in **CITES Appendix I**

Head and body length: 82 - 130cm;

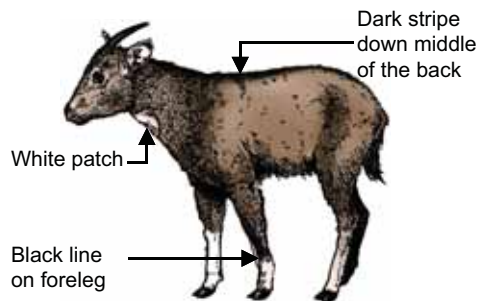
Shoulder Height: 57 - 78.5cm;

Tail length: 7 - 20cm

Horn Length: 7.8 - 12cm

- Smaller body and horns than *Capricornis* spp.
- No obvious gland under the eye
- Coat colour: grey to dark brown or red
- Underparts: usually lighter

Distribution: Bhutan; China; India; Myanmar; Korea; Lao PDR; Nepal; Pakistan; Russian Federation; Thailand



Traded as: Most often as body parts (horns, head, forelegs etc.) for medicine and as meat.



Serow Horns

Credit: Chris Shepherd/TSEA



Serow Horn

Credit: Chris Shepherd/TSEA



Rendering Oil from Head & Legs

Credit: Chris Shepherd/TSEA



Serow Skin

Credit: Chris Shepherd/TSEA



Serow Head

Credit: Chris Shepherd/TSEA



Rendering Oil from Head & Legs

Credit: Chris Shepherd/TSEA

Pantholops hodgsonii - Tibetan Antelope

Tibetan Antelope

Other Names: Chiru (English), Tsod (Tibetan), Zanglingyang (Chinese)

Distribution: China (Qinghai, Xingjiang); India (Jammu-Kashmir)

Physical

Characteristics: Height at the Shoulder: Up to 85cm, Weight: Up to 40kg

International Conservation

CITES Appendix I

IUCN: EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



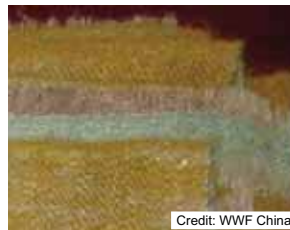
Credit: Tony Lynam

NOTE: You should contact local experts for further definitive identification.

Distinguishing Features:

Products made of Tibetan Antelope hair are known as **Shahtoosh**. Shahtoosh shawls are softer, thinner and less dense than others. Vendors may show this by passing a shawl through a ring.

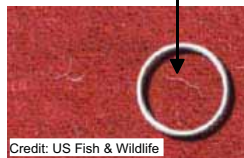
- Mostly off-white and brownish beige (but can be dyed any colour). White is usually the most expensive.
- The weaver may sew his/her initials on one corner of the shawl
- Often has delicate embroidery all over or just along the edge of the shawl
- Shawls often edged with a short fringe
- May have a fine but distinct diamond weave pattern (visible with a magnifying lens)



Credit: WWF China

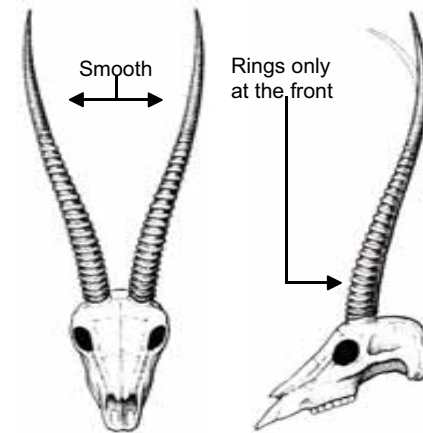


Credit: US Fish & Wildlife



Credit: US Fish & Wildlife

Shahtoosh is made from the under fur and does not contain very long hairs - but may see a few short light coloured "guard hairs" which are coarser than human hair and crimped or crinkled.



Chiru Horns (found only on males) are very distinctive.
Image Credit: Environment Canada

Traded as: Skins and processed into shawls. Occasionally as horns (also used in medicine).



Confiscated Shahtoosh shawls
Credit: NRECD, Thailand



Decorated Chiru skulls and horns
Credit: WWF China

Similar to:

- Pashmina which is made from the hair of the Cashmere Goat can look similar. Much cheaper than shahtoosh
- Can appear similar to shahtoosh: light weight, soft, with or without diamond weave pattern. Loose woven shawls can be passed through a ring as they have less fabric in them.
- Traditionally the fringes on pashmina shawls are longer and are often twisted.



Credit: US Fish & Wildlife



Credit: US Fish & Wildlife

Saiga tatarica - Saiga Antelope

Saiga Antelope

Other Names:

Distribution: Khazakhstan; Mongolia; Russian Federation; Turkmenistan; Uzbekistan

Physical Characteristics: Head and Body Length: 108 - 146cm; Tail Length: 6 - 13cm; Weight: 21 - 51kg

International Conservation Status:
CITES Appendix II

IUCN: CR

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006

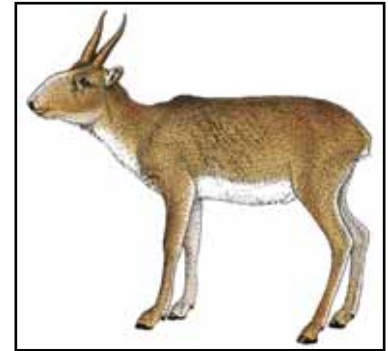


Illustration Credit: Environment Canada

Distinguishing Features of Saiga Horns:



Different from any other horn.

Only males have horns and these are:

- Solid at the base
- Semitransparent
- Light waxy brown in colour
- Almost round in cross-section
- Slightly curved
- Measure up to 30cm (along the curve)

Credit: TRAFFIC SEA



Credit: TRAFFIC SEA



Up to 30cm

Credit: Environment Canada



Credit: Environment Canada

Traded As: Whole horns and horn shavings



Saiga Horns on sale
Credit: TRAFFIC SEA



Credit: TRAFFIC SEA



Shaved Saiga Horn
Credit: Claire Beasall



Credit: TRAFFIC SEA



Credit: TRAFFIC SEA



Examples of Packaging of Saiga Horn Products
Credit: TRAFFIC SEA



Common inscription to describe Saiga Antelope Horn on the packaging of Traditional Medicine products

Saiga Antelope Horn

Chinese Character: 羚羊角

Pinyin: Ling Yang Jiao

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Multi-tined Antlers

Deer Antlers

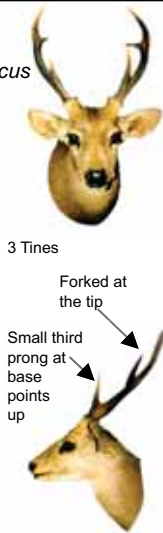
Other deer antlers are traded - these are representatives of those most often found in trade
 Are only found on adult male deer
 Shed and regrown at regular intervals (unlike horns which are permanent).

International Conservation Status:^α

CITES listing varies.

Axis porcinus - Hog Deer

IUCN: EN, *Axis porcinus annamiticus* (from Viet Nam) listed as CR



3 Tines

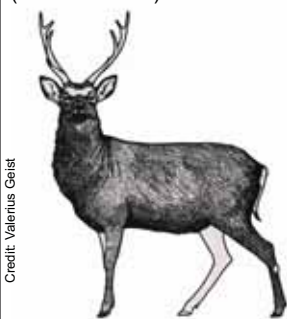
Forked at the tip
 Small third prong at base points up

Head & Body Length: 140 - 150cm
 Tail Length: 17 - 21cm
 Height at shoulder: 65 - 72cm
 Weight: 70 - 110kg
 Distribution: Bangladesh; Cambodia; China; India; Myanmar; Nepal; Pakistan; Thailand

Credit: Valerius Geist

Cervus nippon - Sika Deer

IUCN: LC, *Cervus nippon pseudaxis* (from Viet Nam) listed as CR



Length: around 92cm

Circumference: around 14cm

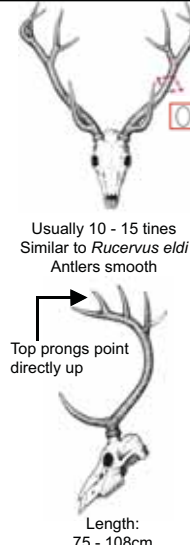
Adult males often have 5 tines

Credit: Valerius Geist

Head & Body Length: 950 - 180cm
 Tail Length: 75 - 150cm
 Height at shoulder: 650 - 110cm
 Weight: up to 80kg
 Distribution: China; Japan; Russian Federation; Taiwan; Viet Nam

Rucervus (Cervus) duvaucelli - Barasingha Deer

CITES Appendix I
 IUCN: EN



Usually 10 - 15 tines
 Similar to *Rucervus eldi*
 Antlers smooth

Top prongs point directly up

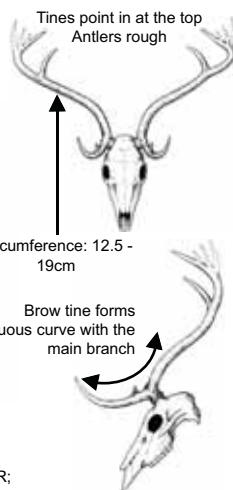
Length: 75 - 108cm

Credit: CITES MA, Switzerland

Head & Body Length: up to 180cm
 Tail Length: 12 - 20cm
 Height at shoulder: 119 - 124cm
 Weight: up to 81kg
 Distribution: India; Nepal

Rucervus (Cervus) eldii - Eld's Deer

CITES Appendix I
 IUCN: EN



Circumference: 12.5 - 19cm

Brow line forms continuous curve with the main branch

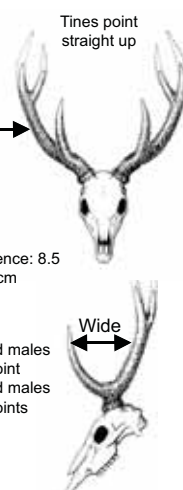
Antler Length: 85 - 117cm

Credit: CITES MA, Switzerland

Head & Body Length: 150 - 170cm
 Tail Length: 22 - 50cm
 Height at shoulder: 120 - 130cm
 Weight: 95 - 150kg
 Distribution: Cambodia; India; Lao PDR; Myanmar; Thailand; Viet Nam

Rusa (Cervus) unicolor - Sambar Deer

IUCN: VU



Tines point straight up

Circumference: 8.5 - 24cm

2 year old males have 1 point
 3 year old males have 2 points

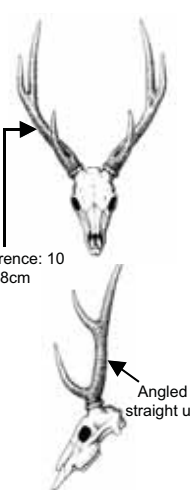
Wide

Antler Length: 38 - 108cm

Head & Body Length: 170 - 270cm
 Tail Length: 22 - 35cm
 Height at shoulder: 120 - 150cm
 Weight: 150 - 300kg
 Distribution: Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Philippines; Sri Lanka; Thailand; Viet Nam

Cervus timorensis - Javan Deer

IUCN: LR



Circumference: 10 - 17.8cm

Angled straight up

Antler Length: 45 - 98cm

Head & Body Length: 130 - 210cm
 Tail Length: 10 - 30cm
 Height at shoulder: 80 - 110cm
 Weight: 50 - 115kg
 Distribution: Indonesia

Traded as:

Whole antlers, antler velvet and other ingredients for traditional medicine



Credit: TRAFFIC Southeast Asia



Credit: TRAFFIC Southeast Asia

Image Source: Environment Canada unless stated

^α Check current conservation status at www.cites.org, www.iucnredlist.org

March 2008



Moschus spp. - Musk Deer Spp.

Musk Deer spp.

Other Names: Kado gaow (Myanmar)

Distribution: Afghanistan; Bhutan; China; India; Korea (North & South); Lao PDR; Mongolia; Myanmar; Nepal; Pakistan; Russian Federation; Viet Nam

Physical Characteristics: Head and Body Length: 70 - 100cm, Shoulder Height: 50 - 61cm, Tail Length: 1.8 - 6cm. Weight: 7 - 17kg

International Conservation Status:

CITES Appendix I: Musk Deer from Afghanistan, Bhutan, India, Myanmar, Nepal and Pakistan.

CITES Appendix II: All Musk Deer from other places.

IUCN: varies from **LC** to **EN** depending on the species.

National Protection in Singapore: Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / Gerald S. CUBITT

Distinguishing Features:



Credit: WWF-Canon / Grigori MAZMANYAN

- No antlers.
- Rump about 5 cm higher than shoulder.
- Body covered with long thick bristly hairs, often white at the base.
- Colour: varies, generally dark brown, mottled and speckled with light grey above and paler beneath.
- Chin, inner border of ears and inside of thighs whitish, may have white spot on each side of the throat.

Upper canine teeth of males as tusks around 7.5cm long, smaller in females.



Credit: WWF-Canon / Grigori MAZMANYAN

Traded as: Musk - For Traditional Medicine - traded either as whole glands or processed (most often as oils, sprays, medicated plasters and raw musk powder).

Musk Gland
Credit: TRAFFIC



The Musk Gland:

- Found between the navel and the genitals of male Musk Deer over three years of age.
- Those in trade are around 4 - 6cm long, 3.5 - 4.5cm wide and 4 - 5cm deep
- The gland is removed from the animal and dried.
- The secretion inside becomes granular (coloured red-brown to black) and powdery.

Examples of Musk Deer Product Packaging
Credit: TRAFFIC



Common inscriptions used to describe musk deer on the packaging of Traditional Medicine products

	Musk Deer	Musk
Chinese Character:	鹿麝	麝香
Pinyin:	Lu She	She Xiang
Roman:	Moschus, Cervi	Moschus

Felidae (1) - Cats

Cats

Physical Characteristics:

Head and Body length: varies 37 - 280cm
 Tail Length: 5.1 - 110cm
 Weight: 1.5 - 306kg

International Conservation Status:

All Cats (except the domestic cat) are listed in **CITES Appendix I or II**

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
 Wild Animals and Birds Act, 1965



Leopard Cat Kitten
 Credit: WWF-Canon / Alain COMPOST

Distinguishing Features:



Leopard
 Credit: WWF-Canon / Martin HARVEY

Head: Rounded and short
 Body: Lithe, muscular, compact, deep chested
 Mammae (nipples): 2 - 4
 Feet: Front - 5 digits; Back - 4 digits. Pads naked.



Domestic Cat claws
 Credit: Claire Beasall

Claws:
 Suited for laceration

Tongue:
 Suited for laceration



Tiger
 Credit: Chris Shepherd/TSEA

Ears: May be pointed or rounded

Eyes: Pupils contract vertically

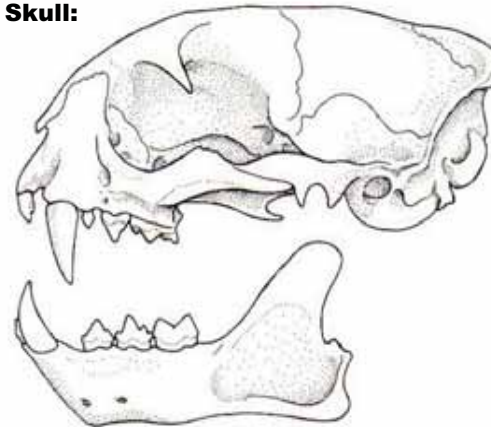


Asian Golden Cat
 Credit: WWF-Canon / Gerald S. CUBITT



Jungle Cat
 Credit: WWF-Canon / Roger HOOPER

Skull:



Felidae (Cat family) Skull
 Rounded and shortened
 28 - 30 teeth



Tiger (*Panthera tigris*) Skull
 Credit: Chris Shepherd/TSEA



Canidae (Dog family) Skull
 Elongated
 42 teeth



Viverridae (Civet family) Skull
 Long and flattened
 32 - 40 teeth



Ursidae (Bear family) Skull
 Massive
 40 - 42 teeth

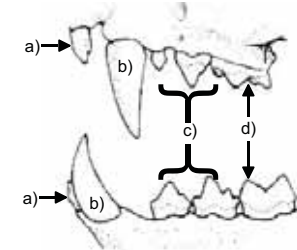


Mustelidae (Otter family) Skull
 Sturdy with short face
 28 - 38 teeth



Image Credit: Tim Lawlor

Teeth:



- a) Front Teeth (Incisors): Small and in a line (Top: 3; Bottom: 3) x 2
- b) Fang (Canine): Long, sharp, slightly curved (Top: 1; Bottom: 1) x 2
- c) Cutting (carnassial/pre-molar) Teeth: Large (Top: 2 - 3; Bottom: 2) x 2
- d) Grinding (molar) Teeth: Upper - small (Top: 1; Bottom: 1) x 2

Image Credit: Tim Lawlor

Traded as:

Skins, bones, meat, teeth, claws, ingredients for traditional medicine and as living animals

Felidae (2) Southeast Asian Cats listed in CITES Appendix I

Southeast Asian Cats listed in CITES Appendix I

All other cats (except domestic cat) are listed in CITES Appendix II

International Conservation Status:^α

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: Chris Shepherd/TSEA

Panthera tigris - Tiger



Credit: WWF-Canon / Mike GRIFFITHS

Head & Body Length: 140 - 180cm,
Tail Length: 60 - 95cm
Weight: 180 - 245kg



Credit: Julia Ng/TSEA



Panthera pardus - Leopard



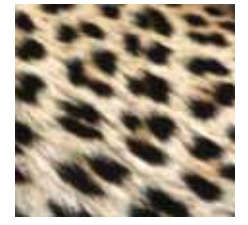
Credit: WWF-Canon / Gerald S. CUBITT

Head & Body Length: 91 - 191cm,
Tail Length: 45 - 78cm
Weight: 45 - 65kg

Leopards with black coats found in some locations - (spots visible in sunlight).



Credit: TSEA



Credit: WWF-Canon / Martin HARVEY

Uncia uncia - Snow Leopard



Credit: WWF-Canon / Martin HARVEY

Head & Body Length: 100 - 130cm,
Tail Length: 80 - 100cm
Weight: 30 - 55kg

Fur is longer than other Southeast Asian cat species, thick on the belly.



Credit: Chris Shepherd/TSEA



Neofelis nebulosa - Clouded Leopard



Credit: WWF-Canon / Gerald S. CUBITT

Head & Body Length: 61 - 106cm,
Tail Length: 55 - 91cm
Weight: 15 - 23kg



Credit: Chris Shepherd/TSEA



Credit: WWF-Canon / Gerald S. CUBITT

Catopuma temmincki - Asian Golden Cat



Credit: WWF-Canon / Gerald S. CUBITT

- Relatively plain coat.
- Coat colour variable (golden-brown to light brown to greyish to black).
- Usually darker along spine and paler underneath.
- Tail dark above, pale below, often with dark tip.

Note: Some animals from Myanmar may have extensive dark spots and stripes. Face and tail same as more common form.

Head & Body Length: 76 - 84cm,
Tail Length: 43 - 50cm
Weight: 12 - 15kg

Pardofelis marmorata - Marbled Cat



Credit: WWF-Malaysia / Ken SCRIVEN

- Fur very thick.
 - Similar to *Neofelis nebulosa* but smaller, more black spots on legs.
- Head & Body Length: 45 - 53cm,
Tail Length: 47 - 55cm
Weight: 2 - 4kg

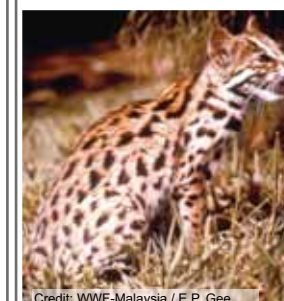
Prionailurus planiceps - Flat-headed Cat



Credit: Claire Beasall

- Small ears, top of head long and flattened.
 - Coat appears deep red with fine grey and pale buff speckles.
- Head & Body Length: 44 - 50cm,
Tail Length: 13 - 17cm
Weight: 1.5 - 2.2kg

Prionailurus bengalensis - Leopard Cat



Credit: WWF-Malaysia / E.P. Gee

- Red-orange or yellowish with black spots over upperparts including tail. Underparts white with black spots.
- Similar to, but much smaller than *Prionailurus viverrinus* - Fishing Cat (Head and body length: 72 - 78cm).

Head & Body Length: 40 - 55cm,
Tail Length: 23 - 29cm
Weight: 3 - 5kg

NOTE: Only populations in Bangladesh; India and Thailand are CITES I. All other populations are CITES II.

Felidae (3) (Cats) - Parts and Derivatives commonly found in Trade

Felidae (Cats) - Parts and Derivatives commonly found in Trade

Traded as: Bones, meat, teeth, claws, ingredients for traditional medicine.
(For details on skin identification see CITES I Southeast Asian Cat Species).

International Conservation Status:^α
All Cats (except the domestic cat) are listed on **CITES Appendix I or II**

National Protection Status in Singapore:
Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Leopard Cat Kitten
Credit: WWF-Canon / Alain COMPOST

Bones:

As whole bones... 

Tiger (*Panthera tigris*) Skull
Credit: Chris Shepherd/TSEA

Confiscated Tiger Bone
Credit: Chris Shepherd/TSEA

...or as an ingredient in Traditional Medicine.

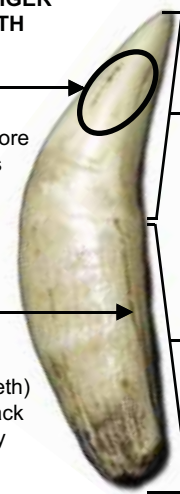
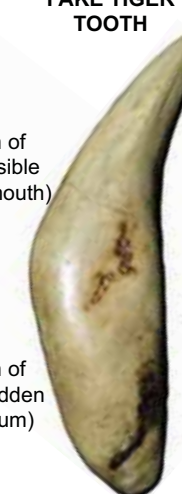
Common inscriptions used to describe Tiger Bone and Leopard Bone on the packaging of Traditional Medicine products

	Chinese Character:	Pinyin:
Tiger Bone	虎骨	Hu Gu
Leopard Bone	豹骨	Bao Gu

Examples of Tiger Bone Product Packaging
Credit: TRAFFIC



Teeth:

REAL TIGER TOOTH  **FAKE TIGER TOOTH** 



Has 1 or more Grooves

Crown (section of tooth visible in the mouth)

Fangs (Canine teeth) tend to crack when dry

Root (section of tooth hidden in the gum)

Tiger tooth - Real and Fake
Credit: Chris Shepherd/TSEA


Teeth may be carved
Credit: Chris Shepherd/TSEA

The skin is real, the teeth are fake. The original teeth were probably sold separately
Credit: Chris Shepherd/TSEA

Claws:

Almost semi-circular
Pale yellow/amber in colour

May be translucent
Pronounced structure on the bony end (planar process)



Pronounced structure on the bony end (planar process)


Credit: USFWS Photo

Penis:

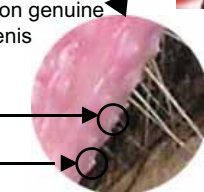
A Tiger Penis is definitely a fake if ...

1. Has very obvious barbs or spines covering the tip
2. Has a large penis bone visible on X-ray
3. Is more than 20cm long


Tiger Penis
Credit: C. Beasall




Barbs are hardly visible on genuine tiger penis



Penis from freshly killed Leopard
Credit: Chris Shepherd/TSEA



Fake Tiger Penis
Credit: Leong/TSEA



© TRAFFIC Southeast Asia 2008

^αCheck current conservation status at www.cites.org, www.iucnredlist.org

Southeast Asian Otters

Southeast Asian Otters

Other Names: Memerang (Malaysia)

Physical

Characteristics: Brown with paler throat, dense fur, long slim body, webbed feet, long muscular tail
 Southeast Asian Otters - Head and Body length: 36 - 80cm,
 Tail Length: 22.5 - 48cm

Distinguishing Features:

Aonyx cinerea
Asian Small-clawed Otter
CITES Appendix II
IUCN: VU

Head and body length: 36 - 55cm,
 Tail length: 25 - 35cm

- Small
- Dark brown to greyish-brown
- Throat and side of neck pale
- Claws very small, do not extend beyond the toe pads



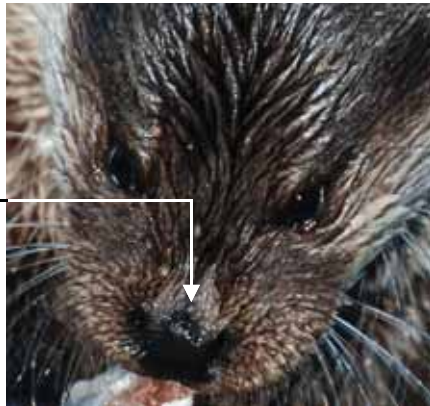
Credit: Gerald S CUTBITT/WWF-Canon

Distribution: Asia - in Southeast Asia: Brunei Darussalam; Cambodia; Indonesia; Lao PDR; Malaysia; Myanmar; Philippines; Singapore; Thailand; Viet Nam

Lutra lutra
Eurasian Otter
CITES Appendix II
IUCN: NT

Head and body length: 55 - 72cm
 Tail length: 37.5 - 48cm

- "W"-shaped edge between fur on face and bare nose
- Short fur with long paler hairs giving greyish effect
- Tip of tail round in cross section



Credit: Sanchez & Lopez/WWF-Canon

Distribution: Europe and Asia.
 In Southeast Asia: Cambodia; Indonesia; Lao PDR; Myanmar; Thailand; Viet Nam

International Conservation Status:^α

All Lutrinae spp. are listed in **CITES Appendix II**, except for *Lutra lutra* which is listed in **CITES Appendix I**

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
 Wild Animals and Birds Act, 1965



Lutra perspicillata (Smooth Otter)
 Credit: Claire Beastall

Lutra sumatrana
Hairy-nosed Otter
CITES Appendix II
IUCN: EN

Head and body length: 50 - 80cm
 Tail length: 37 - 50cm

- Upperparts including side of neck dark brown
- Irregular patches on chin and throat
- Tail round in cross section
- Tip of nose covered in hair



Credit: Annette Olsson/CI Cambodia

Distribution: Cambodia; Malaysia; Thailand; Viet Nam

Lutra perspicillata
Smooth-coated Otter
CITES Appendix II
IUCN: VU

Head and body length: 65 - 75cm
 Tail length: 40 - 45cm

- Fur smooth and shiny
- Throat and side of neck pale
- Straight edge between fur on face and bare nose
- Tail slightly flattened in cross section.



Credit: Claire Beastall

Distribution: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; India; Indonesia; Iraq; Lao PDR; Malaysia; Myanmar; Nepal; Pakistan; Thailand; Viet Nam

Traded as:

Skins, live for the pet trade



Otter skins - right: *Lutra sumatrana* (Hairy-nosed Otter), left: *Lutra perspicillata* (Smooth Otter)
 Credit: Annette Olsson/CI Cambodia

Similar to:

Cynogale benettii - Otter Civet

CITES Appendix II
IUCN: EN

- Entirely dark brown
- Short tail
- Faint pale spot above each eye
- White lips, very long white whiskers



Credit: WWF_PHKA_VATech

Head and body length: 57.5 - 68cm,
 Tail length: 12 - 20.5cm

Distribution: Brunei Darussalam; Indonesia; Malaysia; Thailand. Uncertain presence in China; Singapore; Viet Nam

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Helarctos malayanus - Sun Bear

Sun Bear:

Other Names: Malay weh wan (Myanmar)

Distribution: Bangladesh; Brunei Darussalam; Cambodia; China; India; Indonesia (Sumatra and Kalimantan); Lao PDR; Malaysia; Myanmar; Thailand;

Physical Characteristics: Head and Body Length: 100 - 140cm, Tail Length: 3 - 7cm

International Conservation Status:

CITES Appendix I

IUCN: VU

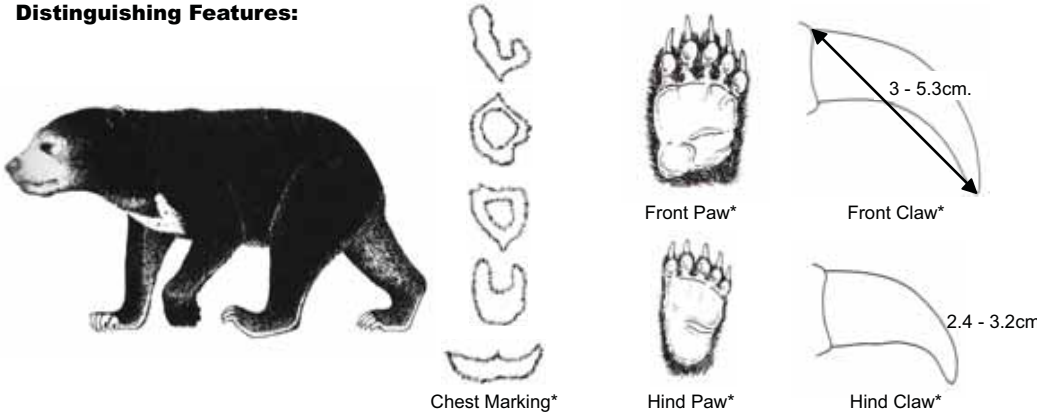
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Gabriella Fredriksson

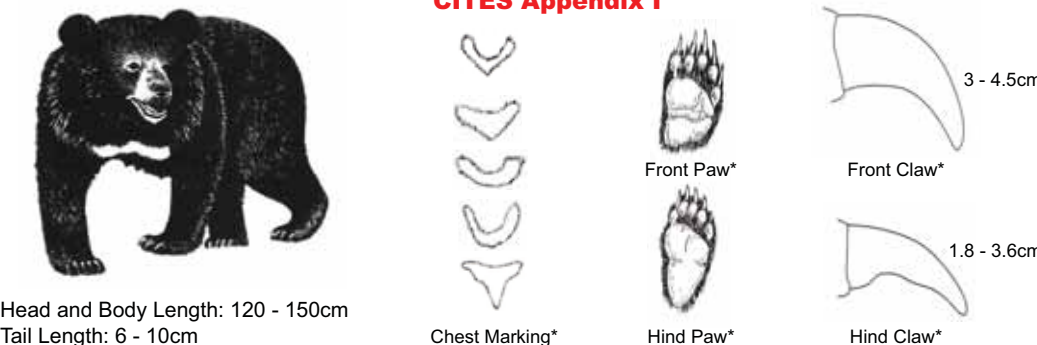
Distinguishing Features:



Similar to:

Asiatic Black Bear - *Ursus thibetanus*

CITES Appendix I



Head and Body Length: 120 - 150cm

Tail Length: 6 - 10cm

* Image Source: Environment Canada

Traded as: Live animals, stuffed animals, meat, claws, paws, teeth, skin, gall bladder, bile.



Sun Bear Paws

Credit: Chris Shepherd/TSEA



Sun Bear Paw

Credit: Klotz



Asiatic Black Bear

Sun Bear

Bear Paws and other parts being rendered for oil

Credit: Chris Shepherd/TSEA

Common inscriptions used to describe bear bile

Chinese Character: 熊胆

Pinyin: Xiong Dan



Sun Bear Gall Bladder

Credit: Mei Hsiu Hwang



Sun Bear Claws

Credit: Mei Hsiu Hwang



Stuffed Sun Bear

Credit: Chris Shepherd/TSEA

Ursus thibetanus - Asiatic Black Bear

Asiatic Black Bear:

Other Names: Weh wan gyi (Myanmar)

Distribution: Afghanistan; Bangladesh; Bhutan; Cambodia; China; India; Iran; Japan; Korea; Lao PDR; Myanmar; Nepal; Pakistan; Russian Federation; Taiwan; Thailand; Viet Nam

Physical Characteristics: Head and Body Length: 120 - 150cm, Tail Length: 6 - 10cm

International Conservation Status:^α

CITES Appendix I

IUCN: VU (CR for subspecies found in Iran and Pakistan)

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Claire Beastall

Distinguishing Features:



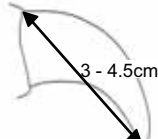
Chest Marking*



Front Paw*



Hind Paw*



Front Claw*



Hind Claw*

Similar to:

Helarctos malayanus - Sun Bear

CITES APPENDIX I



Chest Marking*



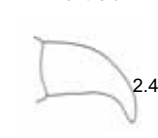
Front Paw*



Hind Paw*



Front Claw*



Hind Claw*

Head and Body Length: 100 - 140cm,
Tail Length: 3 - 7cm

*Image Source: Environment Canada

Traded as: Live animals, meat, claws, paws, teeth, skin, gall bladder, bile.



Bear Paws and Gall Bladders

Credit: Chris Shepherd/TSEA



Asiatic Black Bear Paw

Sun Bear Paw

Bear Paws and other parts being rendered for oil

Credit: Chris Shepherd/TSEA



Bear Gall Bladder

Credit: Chris Shepherd/TSEA

Common inscriptions used to describe bear bile

Chinese Character: 熊胆

Pinyin: Xiong Dan



Removal of Gall Bladder from Bear Cub

Credit: Chris Shepherd/TSEA

Hemigalus derbyanus - Banded Palm Civet & Chrotogale owstoni - Owston's Civet

Banded Palm Civet

Other Names: Musang belang (Malaysia)

Distribution: Brunei Darussalam (?); Indonesia (Kalimantan, Sumatra); Malaysia, Myanmar; Thailand

Physical

Characteristics: Head and Body length: 45 - 56cm, Tail length: 25 - 36cm

Owston's Civet

Other Names: Cây vằn (Viet Nam)

Distribution: Cambodia (?); China; Lao PDR; Viet Nam

Physical

Characteristics: Head and Body length: 51 - 63cm, Tail length: 38 - 48cm

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006 (*Hemigalus derbyanus*)

Distinguishing Features:

Hemigalus derbyanus - Banded Palm Civet

CITES Appendix II

IUCN: VU

- Body colour usually pale buff to golden-brown, paler underneath
- Distinct dark brown or black bars across back,
- Dark longitudinal stripes on neck and face.
- Tail mostly dark brown, banded only at base.



Credit: Chan Ah Lak

Chrotogale owstoni - Owston's Palm Civet

Not CITES listed

IUCN: VU

- Body colour varies from greyish-white to buffy-brown, paler underneath
- Broad black bands across back
- Stripes on neck and face
- Pattern varies between individuals
- Base of tail banded, dark at end



Credit: Scott Robertson

Dark spots on sides of neck and legs.

Traded as:

Live and for fur trade and stuffed as souvenirs



Credit: Barney Long/FFI Vietnam

Prionodon pardicolor - Spotted Linsang & Prionodon linsang - Banded Linsang

Spotted Linsang

Other Names: Cây gấm (Viet Nam)

Distribution: Cambodia; China; India; Lao PDR; Myanmar; Nepal; Thailand; Viet Nam

Physical Characteristics: Head and Body length: 35 - 37cm, Tail length: 31 - 34cm

Banded Linsang

Other Names: Linsang (Malaysia)

Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar; Thailand

Physical Characteristics: Head and Body length: 35 - 45cm, Tail length: 30 - 42cm

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

Traded as:
For fur trade and stuffed as souvenirs

Distinguishing Features:

Prionodon pardicolor - Spotted Linsang

CITES Appendix I

IUCN: LC

- Whitish to light brown to orange buff
- Many irregular black spots on back and sides of body
- Dark lines on the side of the neck
- Spots tend to remain separate



Credit: Barney Long/WWF

8 or 9 complete dark bands around the tail

Spots on back and sides of body

Prionodon linsang - Banded Linsang

CITES Appendix II

IUCN: LC

- Whitish to golden or buff in colour
- Pattern of dark large brown spots which merge into about 5 dark transverse bands on upper parts and longitudinal bands on sides of neck
- 7 black and pale bands around the tail



Credit: Sergio Baffoni

Large spots which merge into 5 dark bands

7 complete dark bands around the tail

Arctictis binturong - Binturong

Binturong

Other Names: Bear Cat (English)

Distribution Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Philippines; Thailand; Viet Nam

Physical Characteristics: Head and Body length: 65 - 95cm, Tail Length: 50 - 80cm
Weight: 6 - 9kg

International Conservation Status:^α
Listed in **CITES Appendix III**
by India

IUCN: VU

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: David Lawson/WWF-Canon

Distinguishing Features:

- Long coarse black fur with some white or red hairs
- Lighter fur found mostly on head, making head lighter than the body



Credit: Claire Beasall

Tail prehensile
(able to grasp
objects)

Long tail with thick
hair, especially
near the base



Credit: Claire Beasall

Ears round, edged in
white with long tufts
of hair at ends

Traded as:

As skins and live as young animals
for the pet trade



Credit: TRAFFIC Southeast Asia

Rhinocerotidae spp. - Rhinoceros spp.

Rhinocerotidae

Other Names: Badak (Malaysia)

Three species are found in Asia:

Dicerorhinus sumatrensis - Sumatran Rhinoceros: Indonesia (Kalimantan, Sumatra); Malaysia; Thailand

Rhinoceros sondaicus - Javan Rhinoceros: Indonesia (Java); Malaysia (extinct?); Viet Nam

Rhinoceros unicornis - Indian/One-horned Rhinoceros: Bhutan; India; Nepal

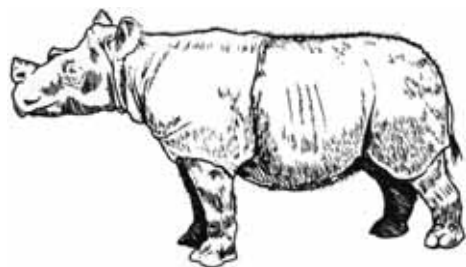
Two species are found in Africa:

Diceros bicornis - Black Rhinoceros and *Ceratotherium simum* - White Rhinoceros

Physical

Characteristics: Shoulder Height: 100 - 180cm, Weight: 0.6 - 2.7 tonnes

Distinguishing Features: As whole animal, cannot be mistaken for anything else

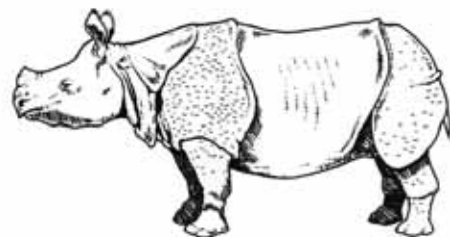


Dicerorhinus sumatrensis - Sumatran Rhinoceros

Shoulder Height: 100 - 150cm

Weight: 0.6 - 0.95 tonnes

Two Horns: Front horn 25 - 79cm, second horn usually under 10cm

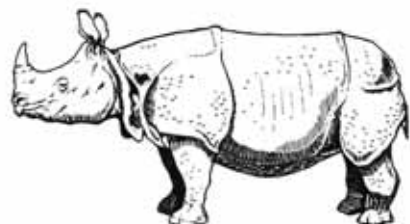


Rhinoceros sondaicus - Javan Rhinoceros

Shoulder Height: 150 - 170cm

Weight: 0.9 - 2.3 tonnes

Single Horn: 25cm in males, females have smaller or no horn.



Rhinoceros unicornis - Indian/One-horned Rhinoceros

Shoulder Height: 175 - 200cm

Weight: 1.8 - 2.7 tonnes

Single Horn: 20 - 61cm

International Conservation Status:

CITES Appendix I

Populations of *Ceratotherium simum simum* from South Africa and Swaziland are listed in **Appendix II**

IUCN: *Dicerorhinus sumatrensis*, *Rhinoceros sondaicus*, *Diceros bicornis*: **CR**, *Rhinoceros unicornis*: **VU**, *Ceratotherium simum*: **NT** (Northern populations of *C. simum*: **CR**)

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Dicerorhinus sumatrensis
Credit: Claire Beasall

Traded as: Horns, skins and trophies

NOTE: Traders often prefer the horn to have some skin attached as proof that is real.

Rhinoceros horn is made of keratin (same as hair and fingernails).

Rhinoceros skin may be up to 5cm thick.

Common inscriptions used to describe rhinoceros horn on the packaging of Traditional Medicine products

Rhinoceros Horn

Chinese Character:

犀牛角

犀角



Ceratotherium simum foot
Credit: Environment Canada



Ceratotherium simum simum horns.
Note the look of the worn areas of the horn
Credit: WWF-Canon / Martin HARVEY



Confiscated Rhinoceros Horn
Credit: WWF-Canon / Mark ATKINSON



Rhinoceros Horn is used in the manufacture of dagger handles in the Yemen
Credit: WWF-Canon / Esmond Bradley MARTIN

Manis spp. - Pangolin spp.

Pangolin

Other Names: Thing kway jut (Myanmar) Tê Tê (VN)

Distribution: Africa and Asia

Physical

Characteristics: Head & Body Length: 425 - 550mm, Tail Length: 160 - 470mm, Weight: 5-7kg

Distinguishing Features:



Prehensile tail

No teeth

Conical shaped head

Credit: Chris Shepherd/TSEA

Similar to: No other group of animals
There are 8 species of Pangolins: 4 are found in Africa, 1 is found in South Asia.
There are 3 species native to Southeast Asia.

NOTE: Distinguishing between *Manis javanica* and *Manis culionensis* is difficult.

Manis pentadactyla (Chinese Pangolin)

- Claws of hind feet less than twice as long as those on fore feet
- 20 or fewer scales along tail edge

Manis javanica (Malayan Pangolin) and *Manis culionensis** (Palawan/Philippine Pangolin)

- Claws of hind feet more than twice as long as those on fore feet
- More than 20 scales along tail edge

Distribution: Cambodia; China; Hong Kong; India; Lao PDR; Myanmar; Nepal; Taiwan; Thailand; Viet Nam

Distribution: Brunei Darussalam; Cambodia; Indonesia; Lao PDR; Malaysia; Myanmar; Singapore; Thailand; Viet Nam

*Distribution: Palawan and Culion Islands, Philippines

International Conservation Status:

CITES Appendix II : Zero Quota:
International Trade in wild caught Asian Pangolins for commercial purposes is NOT permitted

IUCN: Varies up to EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: Chris Shepherd/TSEA

Traded as: Usually transported as live animals, also seen as frozen whole animals, scales, leather, foetus, meat and medicine



Pangolin Seizure
Credit: Royal Thai Police



Removing Scales from Skin
Credit: TRAFFIC SEA



Pangolin Scales
Credit: Julia Ng/TSEA

Common inscriptions used to describe pangolin
Chinese Character: 穿山甲
Pinyin: Chuan Shan Jia



Pangolin Foetuses
Credit: Chris Shepherd/TSEA



Pangolin Leather Bag
Credit: James Compton/TSEA

Primates - Apes and Monkeys

Primates

International Conservation Status:^a

All are at least **CITES Appendix II**.

See below for Southeast Asian Primates listed in **CITES Appendix I**

Distinguishing Features: All primates have:

- Forward facing eyes
- Short snout, flat face
- Nails instead of claws
- Four limbs



Nycticebus coucang
(Sunda Slow Loris)
Credit: Claire Beastall



Trachypithecus cristatus
(Silvered Langur)
Credit: Claire Beastall



Macaca nemestrina
(Southern Pig-tailed Macaque)
Credit: WWF Malaysia / Chew Yen Fook



Nomascus gabriellae
(Buff-cheeked Gibbon)
Credit: Claire Beastall



Pongo abelii young animal
(Sumatran Orangutan)
Credit: Chris Shepherd/TSEA

Gibbons and orangutans do not have a tail

CITES I listed Southeast Asian Primates:

Nycticebus spp. (All Loris species)
IUCN: Varies up to EN
Distribution: Bangladesh; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Philippines; Thailand; Viet Nam

Presbytis potenziani (Mentawai Leaf Monkey)
IUCN: EN
Distribution: Indonesia (Mentawai Islands)

Simias concolor (Pig-tailed Langur)
IUCN: CR
Distribution: Indonesia (Mentawai Islands)

Nasalis larvatus (Proboscis Monkey)
IUCN: EN
Distribution: Brunei Darussalam; Indonesia (Kalimantan), Malaysia (Sabah and Sarawak)

Rhinopithecus spp. (All Snub-nosed Monkeys)
IUCN: Varies up to CR
Distribution: China; Myanmar; Viet Nam

Pygathrix spp. (All Douc Langurs)
IUCN: Varies up to CR
Distribution: Cambodia; Lao PDR, Viet Nam

Hylobatidae spp. (All Gibbons and Siamang)
IUCN: Varies up to CR
Distribution: Bangladesh; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Thailand; Viet Nam

Hominidae spp. (All Great Apes) - Includes Orangutan
Pongo spp. (Sumatran and Bornean Orangutans)
IUCN: Varies up to CR
Distribution: Indonesia (Sumatra and Kalimantan); Malaysia (Sabah, Sarawak).

Traded as: Live animals, meat, skulls, parts for medicine

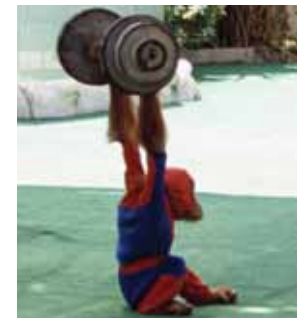


Siamang at Market
Credit: Chris Shepherd/TSEA

Nasalis larvatus
(Proboscis Monkey)
Credit: WWF - Canon / Alain COMPOST



Pygathrix nemaeus
(Red-shanked Douc Langur)
Credit: WWF - Canon / Martin HARVEY



Orangutan at Theme Park
Credit: Chris Shepherd/TSEA



Monkey Skull on sale
Credit: Claire Beastall

^a Check current conservation status at www.cites.org, www.iucnredlist.org

Nycticebus spp. - Loris spp.

Loris

Other Names: Kongkang (Malaysia), Culi (Viet Nam)

Distribution: Bangladesh; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Philippines; Thailand; Viet Nam

Physical Characteristics: Head and Body Length: 21 - 38cm, Tail Length: up to 2.5cm

Distinguishing Features:



Credit: Claire Beastall

- Large eyes
- Dark rings around the eyes
- Wet nose
- Small ears
- Five toes on each foot
- Short or no visible tail



Credit: WWFM / MPS

Similar to:

Tarsius spp.
Tarsier

CITES Appendix II

Head and Body Length: 9.5 - 15cm,
Tail Length: up to 20 - 24cm

Distribution: Brunei Darussalam;
Indonesia; Malaysia; Philippines



Credit: WWF-Canon / Jürgen FREUND

- Very large eyes
- Very large ears
- Five toes on each foot
- Tail much longer than body

International Conservation Status:^α

CITES Appendix I

IUCN: Varies up to EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: WWFM / M. Kavanagh

Traded as: Live animals, skinned or prepared for food or traditional medicine.



Loris prepared for Traditional Medicine

Credit: Chris Shepherd/TSEA



Loris in Market

Credit: Chris Shepherd/TSEA



Loris Skins

Credit: Chris Shepherd/TSEA



Loris prepared for Traditional Medicine

Credit: Chris Shepherd/TSEA



Loris in Market

Credit: Chris Shepherd/TSEA

^αCheck current conservation status at www.cites.org, www.iucnredlist.org

Macaca fascicularis - Long-tailed Macaque

Long-tailed Macaque

Other Names: Kera (Malaysia), Miao tangar (Myanmar)

Distribution: Bangladesh; Brunei Darussalam; Cambodia; Hong Kong; India; Indonesia; Lao PDR; Malaysia; Mauritius; Myanmar; Palau; Philippines, Singapore;

Physical Characteristics: Head and Body Length: 38 - 65cm, Tail Length: 40 - 55cm, Adult Weight: Male: 4.7 - 8.3kg, Female: 2.5 - 5.7kg

Distinguishing Features:



Hair on crown of head grows backwards (often resulting in crest)

Pinkish face

Long tail

Males: Cheek whiskers, moustache

Females: Beard

Infants: Born black

Coat: varies from grey to reddish-brown - underparts lighter



Credit: WWF / Gerald Cubitt

Credit: WWF / Stephen Hogg

International Conservation

CITES Appendix II

IUCN: LC

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: WWF / Chew Yen Fook

Traded as: Live animals for the pet trade, often as young animals, also as meat



Infant Long-tailed Macaques

Credit: Chris Shepherd/TSEA



Adults and juveniles may be transported in baskets

Credit: Chris Shepherd/TSEA

Similar to: Within Southeast Asia - other brown macaques

Macaca arctoides - Stump-tailed Macaque



Tail Length: 1.4 - 6.9cm

Tail: almost hairless

Face: hairless and mottled deep red and black

Infants: born white

Adult Weight:
Male: 4.7 - 8.3kg,
Female: 2.5 - 5.7kg

Credit: Tilo Nadler

Macaca assamensis - Assamese Macaque



Tail Length: 20 - 29cm

Coat varies from yellowish to darkish brown.

Face: hairless and light red in adults

Hindquarters: greyish

Adult Weight:
Male: 7.9 - 15kg,
Female: 4.9 - 8.6kg

Credit: Tilo Nadler

Macaca mulatta - Rhesus Macaque



Tail Length: 19 - 30cm

Coat brown.

Face light red, rump red

Adult Weight:
Male: 5.6 - 10.9kg,
Female: 4.4 - 10.9kg

Credit: WWF-Canon / Martin HARVEY

Macaca nemestrina* and Macaca leonina Southern* and Northern Pig-Tailed Macaques



Tail Length: 13 - 24.5cm

Tail: often held curved, thinly furred or naked

Coat: brown above, white beneath.

Head: dark brown

Adult Weight:
Male: 6.2 - 14.5kg,
Female: 4.7 - 10.9kg

Credit: WWF / Stephen Hogg

Elephas maximus & Loxodonta africana - Elephant

Elephant

Other Names: Gajah (MY), Voi (VN)

Distribution:

Asian Elephant (Elephas maximus): Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Sri Lanka; Thailand; Viet Nam

African Elephant (Loxodonta africana): Angola; Benin; Botswana; Burkina Faso; Cameroon; Central African Republic; Chad; Congo; Democratic Republic of Congo; Cote d'Ivoire; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Ghana; Guinea; Guinea Bissau; Kenya; Liberia; Malawi; Mali; Mozambique; Namibia; Niger; Nigeria; Rwanda; Senegal; Sierra Leone; Somalia; South Africa; Sudan; Tanzania; Togo; Uganda; Zimbabwe

Physical Characteristics:

Height to shoulder: Up to 4 metres, Weight: Up to 10 tonnes

Similar to: No other animal as a living specimen

As Tusk or Carved:

Natural Substitutes: Mammoth Tusk (extinct 10,000 years ago), Narwhal Tusk, Walrus Tusk or Tooth, Whale Tooth, Wart Hog Tusk, Hippopotamus Tooth, Bone, Helmeted Hornbill Casque, Tagua Palm Nuts

Artificial Substitutes: Resin, Casein

Distinguishing Elephant Ivory from substitutes:

Under ultra violet light:

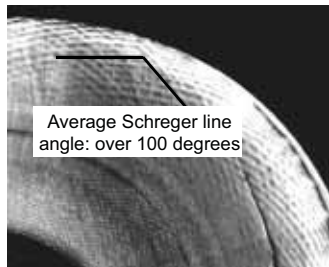
- Mammoth and elephant ivory looks white/blue fluorescent
- Mammoth ivory may show brown or blue-green blemishes
- Elephant ivory does not

Schreger Lines:

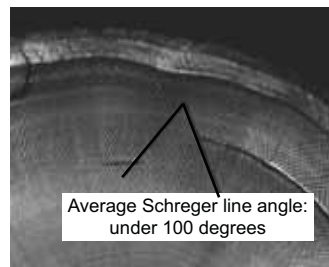
Natural lines found only on polished cross section of natural elephant or mammoth ivory.

Use those on the edge of the tusk to distinguish between elephant and mammoth ivory.

1. Use a photocopy machine to get an image of the ivory.
2. Put a transparent sheet between the object and the glass and enlarging the image to make it clearer.
3. Mark selected angles on the photocopy and extend them so that you can measure them.
4. Measure a few of these angles and work out the average of these.



Elephant Ivory



Mammoth Ivory

International Conservation Status:

CITES Appendix I

Loxodonta africana populations of Botswana, Namibia, South Africa and Zimbabwe CITES Appendix II**

IUCN: Elephas maximus - EN
Loxodonta africana - NT

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Chris Shepherd/TRAFFIC Southeast Asia

Traded as: Live animals (for the trekking and tourist industry), tusks or worked ivory, teeth, skull and other bones, hair, skin, trophies



Elephant Hair and Elephant Hair rings
Credit: Chris Shepherd/TSEA



Elephant Teeth
Credit: Chris Shepherd/TSEA



Elephant Skin
Credit: Chris Shepherd/TSEA



Chopsticks made from Elephant Ivory
Credit: Chris Shepherd/TSEA



Whole Elephant Tusk
Credit: Chris Shepherd/TSEA

Carved Elephant Tusk
Credit: Chris Shepherd/TSEA



Carved souvenirs made from Elephant Ivory
Credit: Chris Shepherd/TSEA

Dendrocygna javanica - Lesser Whistling Duck and Dendrocygna arcuata - Wandering Whistling Duck

Lesser Whistling Duck

Other Names: Itek Belibis, Belibis Kembang (Malaysia)

Distribution: Brunei Darussalam; Cambodia; China; India; Indonesia; Japan; Lao PDR; Malaysia; Myanmar; Nepal; Pakistan; Singapore; Sri Lanka; Taiwan; Thailand; Viet Nam

Physical Characteristics: Length: 38 - 41cm

Wandering Whistling Duck

Other Names:

Distribution: Australia; Indonesia; New Britain; Papua New Guinea; Philippines; Singapore

Physical Characteristics: Length: 40 - 45cm

International Conservation Status:^a

Not listed in CITES

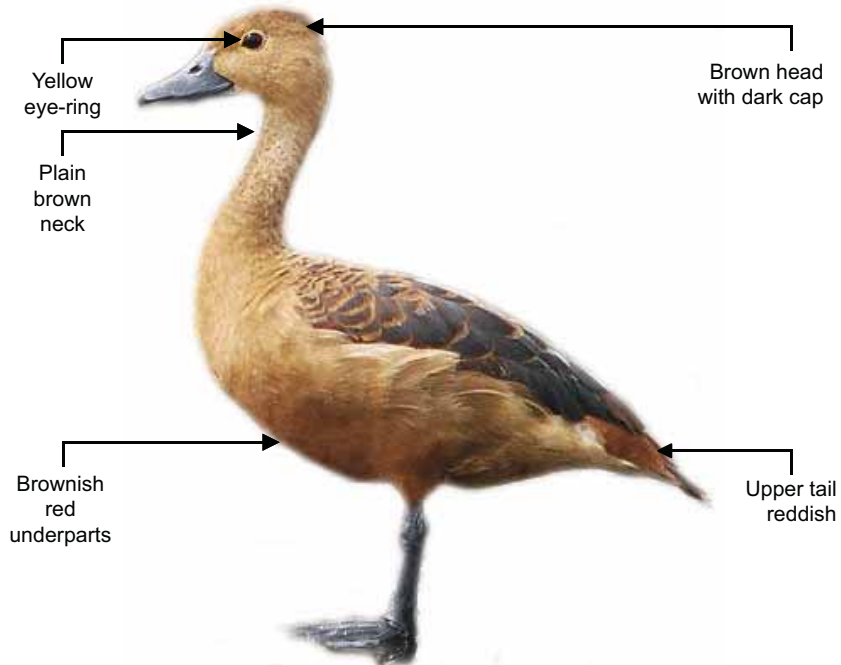
IUCN: *Dendrocygna javanica*: LC
Dendrocygna arcuata: LC

National Protection in Singapore:

Dendrocygna arcuata Wild Animals and Birds Act
Dendrocygna javanica Not protected

Distinguishing Features:

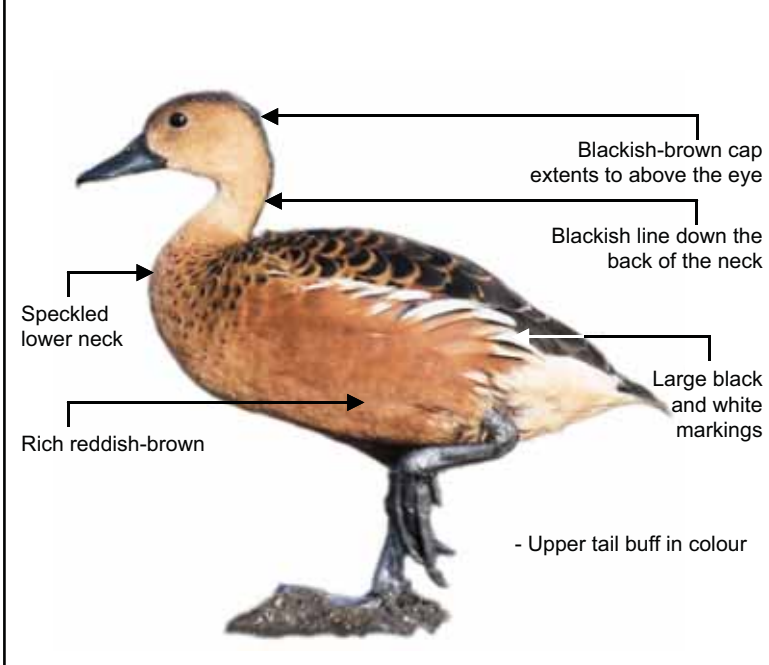
Dendrocygna javanica - Lesser Whistling Duck



Credit: Choy Wai Mun

Distinguishing Features:

Dendrocygna arcuata - Wandering Whistling Duck



Credit: Lynn and Brad Weinert

Traded as:

Live animals



Dendrocygna javanica
Credit: Chris Shepherd/TSEA

Leptoptilos spp. - Adjutant Storks

Greater Adjutant Stork

Other Names: Gio đầy lớn (Viet Nam)

Distribution: Cambodia; India
Vagrant: Bangladesh; Nepal, Thailand; Viet Nam
Possibly extinct: Lao PDR, Myanmar

Physical Characteristics: Length: 145 - 150cm

Lesser Adjutant Stork

Other Names: Botak Kecil (Malaysia), Gio đầy giava (Viet Nam)

Distribution: Bangladesh; Brunei Darussalam; Cambodia;
Indonesia; Lao PDR; Malaysia, Myanmar;
Nepal; Sri Lanka; Thailand; Viet Nam

Physical Characteristics: Length: 122.5 - 129cm

International Conservation Status:^a

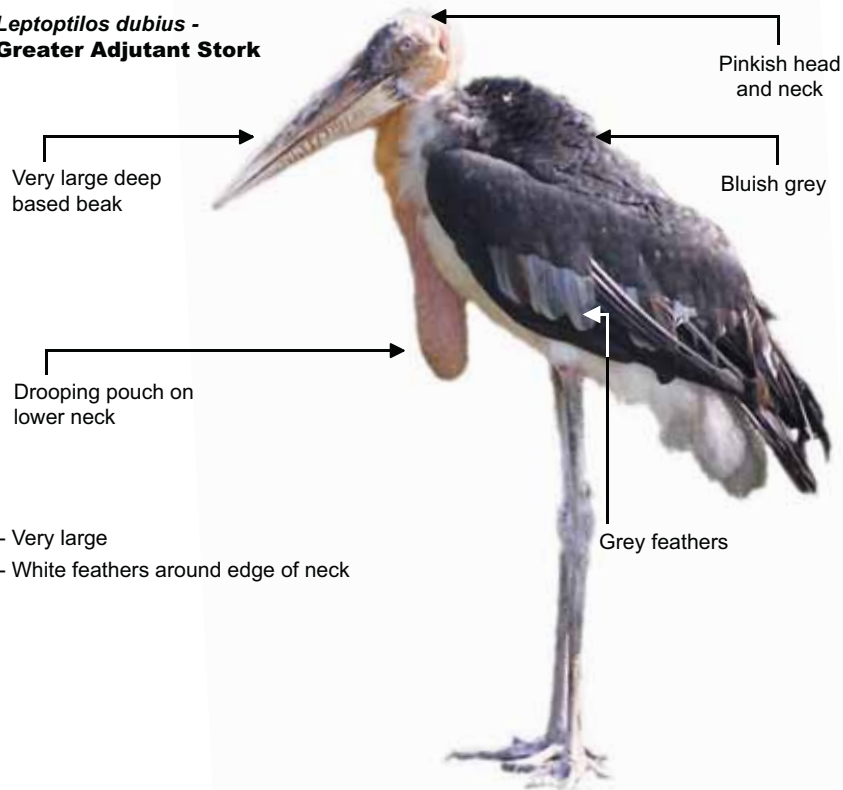
Not listed in CITES

IUCN: *Leptoptilos dubius*: EN
Leptoptilos javanicus: VU

National Protection in Singapore:
Not protected

Distinguishing Features:

Leptoptilos dubius -
Greater Adjutant Stork

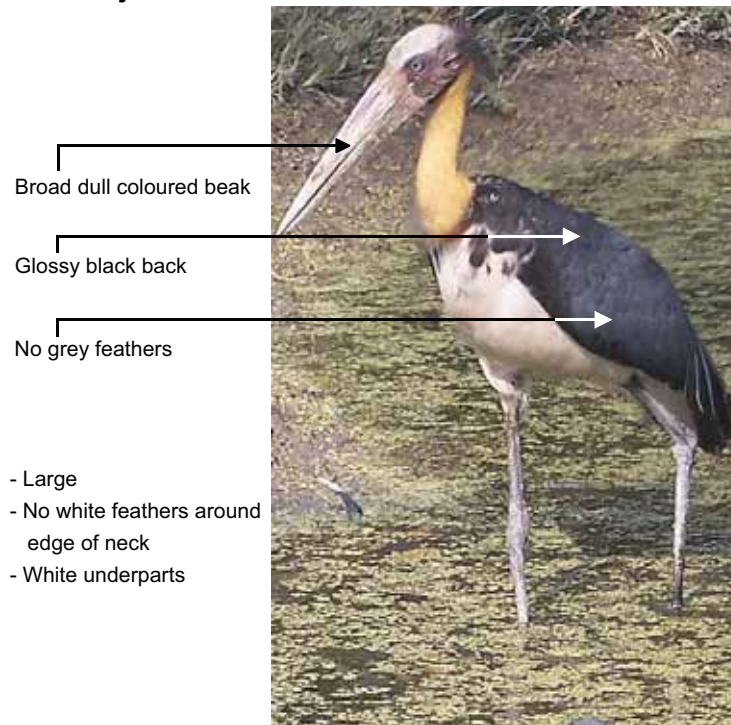


- Very large
- White feathers around edge of neck

Credit: Claire Beastall

Distinguishing Features:

Leptoptilos javanicus -
Lesser Adjutant Stork



- Large
- No white feathers around edge of neck
- White underparts

Credit: Claire Beastall

Traded as:

Live animals



Leptoptilos javanicus
Credit: Chris Shepherd/TSEA

Bucerotidformes - Hornbills

Hornbills

Other Names:

Distribution: Africa and Asia

Physical Characteristics: Length: 320cm

International Conservation Status:

4 species of Southeast Asian Hornbills are listed in **CITES Appendix I**; all other Southeast Asian Hornbills are listed in **CITES Appendix II**

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

Rhyticeros undulatus
(Wreathed Hornbill)
Credit: Claire Beasall
(Marking on pouch often partly concealed)



Distinguishing Features:

Hard growth (casque) on top of the bill
Curved bill

Anthracoceros albirostris
(Oriental Pied Hornbill)
Credit: Claire Beasall

Similar Toucans - All from South America

No growth (casque) on top of the bill

Ramphastos toco (Toco toucan) **CITES Appendix I**
Credit: WWF-Canon / Michel GUNTHER

4 species of Southeast Asian Hornbills listed in CITES Appendix I

Rhinoplax vigil
(Helmeted Hornbill)
IUCN: NT

Red casque with yellow at front edge

Adult female - pale greenish skin on head and neck and a shorter tail

Two very long centre tail feathers

Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar; Thailand

Buceros bicornis
(Great Hornbill)
IUCN: NT

Distribution: Bhutan; Cambodia; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Thailand; Viet Nam

Rhyticeros (Aceros) subruficollis
(Plain-pouched Hornbill)
IUCN: VU

Black body
Tail all white

Has no marking on the pouch.

Adult female - black head and neck, pouch blue
Juvenile - reddish head and neck, pouch yellow

Distribution: Malaysia; Myanmar; Thailand

Aceros nipalensis
(Rufous-necked Hornbill)
IUCN: VU

Heavy yellow bill
Naked red throat

White edge to tail and wings

Adult female mainly black, juvenile red head and neck

Distribution: Bhutan; China; India; Lao PDR; Myanmar; Thailand; Viet Nam

Traded as:

Casques and live birds for the pet trade

Anthracoceros albirostris
(Oriental Pied Hornbill)
Credit: TRAFFIC Southeast Asia

Buceros bicornis (Great Hornbill) casque
Credit: Chris Shepherd/TRAFFIC SEA

Buceros bicornis (Great Hornbill) casques for sale
Credit: Chris Shepherd/TRAFFIC Southeast Asia

Buceros bicornis (Great Hornbill) casque
Credit: Chris Shepherd/TRAFFIC SEA

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^α Check current conservation status at www.cites.org, www.iucnredlist.org and www.birdlife.org/datazone/search/species_search.html

Copsychus malabaricus - White-rumped Shama

White-rumped Shama

Other Names: Murai Batu, Murai Hutan (Malaysia)

Distribution: Bangladesh; Butan; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Singapore; Sri Lanka; Thailand; Viet Nam (introduced into Hawaii, USA)

Physical Characteristics: Length: up to 25cm

International Conservation Status:^α
Not CITES listed

IUCN: LC

National Protection in Singapore:
Wild Animals and Birds Act, 1965



Credit: John Steed

Distinguishing Features:

- White rump
- Male: Glossy black with chestnut belly
- Female: Grey with chestnut belly



Female White-rumped Shama
Credit: Suppalak Klabdee



White feathers under the tail, these may be visible at the edge from above

Male White-rumped Shama
Credit: Lee Kip Yang



White cap seen in birds from Sabah, Malaysia

Male White-rumped Shama (Sabah, Malaysia)
Credit: Suppalak Klabdee

Traded as:

Live animals for songbird trade.

NOTE: Females do not sing and so are very rarely seen in trade



Smuggler arrested in US with live songbirds, including *Copsychus malabaricus*.
Credit: US Fish & Wildlife Service

Similar to:

Copsychus saularis
Magpie Robin

IUCN: LC; Not CITES listed

- Glossy black
- Belly and under tail white
- White wing stripe

Length: up to 21.6cm
Distribution: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Pakistan; Philippines; Singapore; Sri Lanka; Thailand; Viet Nam



Credit: John Steed

Trichixos pyrropyga
Rufous-tailed Shama

IUCN: NT; Not CITES listed

Length: up to 21 - 22.5cm
Distribution: Brunei Darussalam; Indonesia; Malaysia; Thailand



Credit: Lim Kim Chye



White brow
No white rump

Credit: Wouter Thijs

Copsychus luzoniensis
White-browed Shama

IUCN: LC; Not CITES listed

Rarely found in trade

Length: up to 18cm
Distribution: Philippines

Falconiformes - Birds of Prey

Birds of Prey

Includes Hawks, Eagles, Vultures, Falcons, Kites etc.

Other Names:

Distribution: Worldwide

Physical Characteristics:

Height: 14 - 118cm; Wing span: 26 - 300cm, Weight: 35g - 14kg

Distinguishing Features:

- Upright posture
- Sharp claws (talons)
- Hooked Beak
- Tend to be dull in colour

Hooked bill

Sharp claws (talons)



Spizaetus bartelsi - Javan Hawk Eagle (juvenile)
Credit: TRAFFIC Southeast Asia



NOTE:
Identifying chicks to species is very difficult.

International Conservation Status:^a

All are **CITES Appendix II*** except for 15 species listed in **CITES Appendix I** - 5 of these are found in Southeast Asia:

- Aquila heliaca* - Eastern Imperial Eagle
- Haliaeetus albicilla* - White-tailed Eagle
- Pithecophaga jefferyi* - Philippine Eagle
- Falco jugger* - Laggar Falcon
- Falco peregrinus* - Peregrine Falcon

* New World Vultures: 1 species listed in Appendix III, 4 species not listed

IUCN: Varies - up to CR

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Falco peregrinus - Peregrine Falcon
Credit: WWF-Canon / John S. MITCHELL

Traded as: Live animals, body parts for traditional medicine/magic



Elanus caeruleus - Black-winged Kite
for sale in a market
Credit: Chris Shepherd/TSEA



Aviceda leuphotes (Black Baza) for sale in a market
Credit: Chris Shepherd/TSEA



Bird of Prey for sale in a market
Credit: Chris Shepherd/TSEA

Pycnonotus zeylanicus - Straw-headed Bulbul

Straw-headed Bulbul

Other Names: Cangkurawa (Indonesia), Barau-barau (Sabah, Malaysia)

Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar; Singapore; Thailand

Physical Characteristics: Height: 30cm - this is the largest of the Bulbuls

International Conservation Status:^α

CITES Appendix II

IUCN: VU

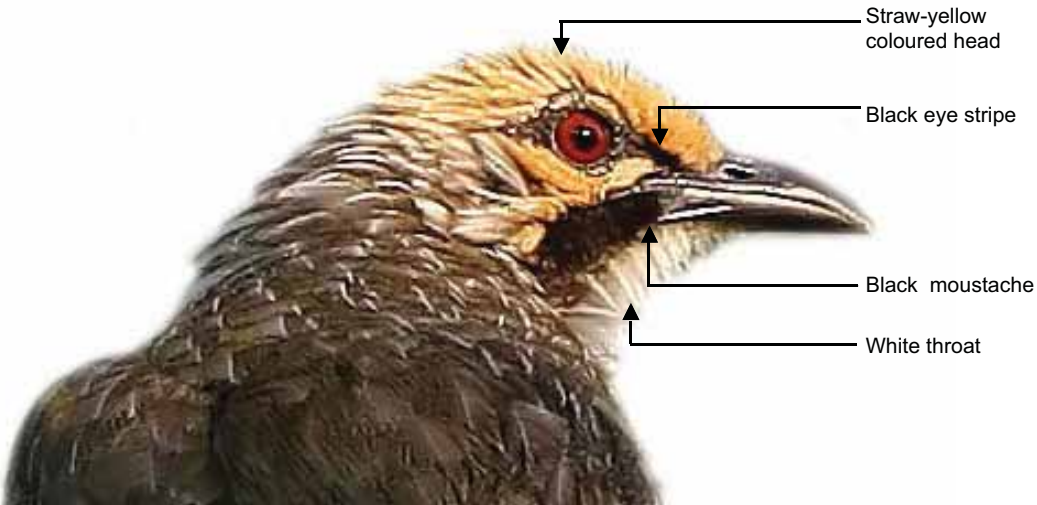
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: Mervin Quah

Distinguishing Features:



Credit: Mervin Quah

Similar to: Other Bulbuls

This is the largest of the Bulbuls
No other Bulbul has a straw-yellow head

Traded as: Live animal for the bird song and pet trade



Straw-headed Bulbul in a Market

Credit: Chris Shepherd/TSEA

^αCheck current conservation status at www.cites.org, www.iucnredlist.org, www.birdlife.org/datazone/search/species_search.html

Gracula religiosa - Hill Mynah

Hill Mynah

Other Names: Tiong Emas (Malaysia)

Distribution: Bhutan; Brunei Darussalam; Cambodia; China; India; Indonesia; Lao PDR; Malaysia, Myanmar; Nepal; Philippines; Singapore; Sri Lanka; Thailand; Viet Nam

Physical Characteristics: Height: 30cm, Weight: 400g

International Conservation Status:

CITES: Appendix II

IUCN: LC

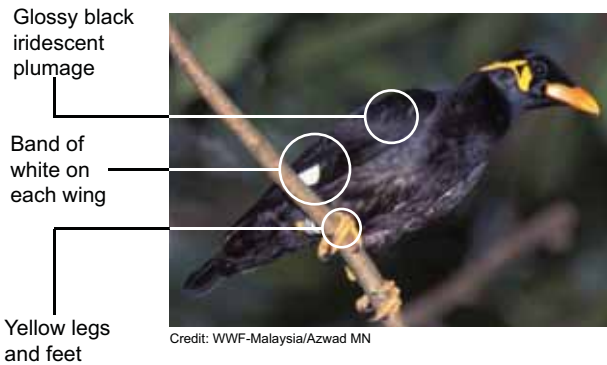
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: WWF-Malaysia / Oon Swee Hock

Distinguishing Features:



Credit: WWF-Malaysia/Azwad MN

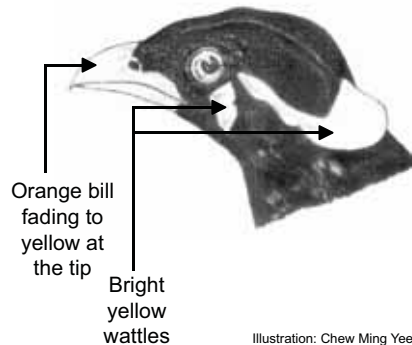


Illustration: Chew Ming Yee

Traded as: Live animals for the Pet trade.



Hill Mynah in Market
Credit: Chris Shepherd/TSEA

Similar to:

Mino dumonti
Yellow-faced Mynah

Yellow face patch around the eyes - has no wattles



Credit: Brent Stilton / Getty Images / WWF-UK

Acridotheres tristis
Common Mynah

Yellow face patch around the eyes - has no wattles

Chest brown

White tip to tail



Credit: Yen Loong Lean



Hill Mynahs in a Market
Credit: Chris Shepherd/TSEA

Psittaciformes spp. - Parrots

Parrots

Other Names:

Distribution: Africa; South and Central Americas; Asia; Oceania

Distinguishing Features of Parrots:

Height: from 8cm up to 100cm
Whilst most are mainly green in colour, some are white or even red and blue

Head: Large

Neck: Short

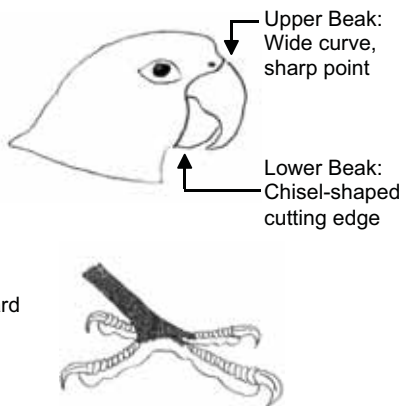
Legs: Short

Beak: Broad at the base

Upper Beak: Wide curve, sharp point

Lower Beak: Chisel-shaped cutting edge

Feet: Two toes point backward
Two toes point forward



International Conservation Status:^α

All Parrots either CITES Appendix I or Appendix II EXCEPT FOR the following FOUR species which are not protected:

- Agapornis roseicollis* - Peach-faced Lovebird
- Melopsittacus undulatus* - Budgerigar
- Nymphicus hollandicus* - Cockatiel
- Psittacula krameri* - Ring-necked Parakeet

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Female Eclectus Parrot
Credit: Chris Shepherd/TSEA

Traded as: Live animals and live eggs (carried on the person) for the pet trade.

Parrots NOT listed in CITES:

Agapornis roseicollis
Peach-faced Lovebird

Distribution: Southwest Africa
Length: 16cm

Natural colouration:

- Red band above beak (1)
- Beak pale in colour (2)
- Peach coloured cheeks (3)
- Green back of neck (4)
- Blue rump (5)

NOTE: Many colour variations in captive bred birds - back may be white, yellow or blue.

Very similar parrot species are protected - seek advice if unsure.



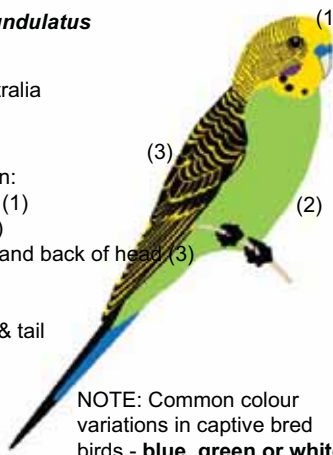
Melopsittacus undulatus
Budgerigar

Distribution: Australia
Length: 18cm

Usual Colouration:

- Plain forehead (1)
 - Plain breast (2)
 - Bars on wings and back of head (3)
- Distinctive:
- Small size
 - Pointed wings & tail

NOTE: Common colour variations in captive bred birds - blue, green or white.



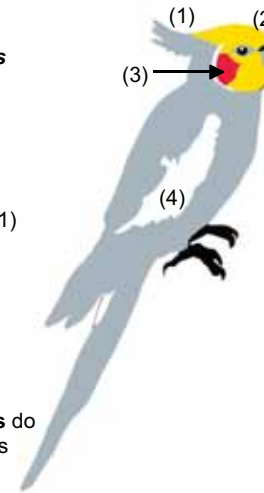
Nymphicus hollandicus
Cockatiel

Distribution: Australia
Length: 29 - 33cm

Colouration:

- Upward curving crest (1)
 - Yellow face (2),
 - Orange patch (3)
 - White wing flash (4)
- Distinctive:
- Pointed wings & tail

NOTE: **Colour variations** do occur in captive bred birds



Psittacula krameri
Ring-necked Parakeet

Distribution: Africa, Asia
Length: 40cm

Natural colouration:

- Pale grass-green body (1)
- Green head (2)
- Black chin and black-pink collar and lavender top of head (adult male only) (3)
- Blue tail with yellow tip (4)

Distinctive:

- Pointed tail
- No maroon shoulder patches

NOTE: Colour variations in captive bred birds - **blue or yellow.**

Very similar parrot species are protected - seek advice if unsure



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^α Image Source: Environment Canada

^α Check current conservation status at www.cites.org, www.iucnredlist.org and www.birdlife.org/datazone/search/species_search.html

Cacatua spp. - White Cockatoos

White Cockatoos

Other Names: Kakatua (Indonesia)

Distribution: Australia; Indonesia; New Zealand; Papua New Guinea; Philippines; Singapore; Solomon Islands

Physical Characteristics: White or pale salmon-pink feathers. Medium - large birds with short squarish tail and long round-tipped wings. Both sexes look alike. Height: Up to 51cm

International Conservation Status:

CITES Appendix I - 4 species
CITES Appendix II - all others

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965

Traded as: Live animals and eggs (carried on the person) for the pet trade



Tanimbar Cockatoos at a Market
Credit: Chris Shepherd/TSEA

Distinguishing Features of the 4 CITES APPENDIX I species:

Cacatua goffini
Tanimbar Cockatoo

Pink area between eye and beak
White eye ring
Yellow under wings and tail

Distribution: Indonesia
Height: 32cm

Credit: Chris Shepherd/TSEA

Cacatua haematuropygia
Philippine Cockatoo

Yellow under wings and tail
Red under tail.

Distribution: Philippines
Height: 31cm

Credit: Katala Foundation Inc.

Cacatua sulphurea
Yellow-crested Cockatoo

Yellow Crest
Yellow wash on face
Dull yellow wash under wings and base of tail

Distribution: Indonesia
Height: 33cm

Credit: WWF-Canon / Martin HARVEY

Similar: *Cacatua galerita*
larger, no yellow on face

Cacatua moluccensis
Salmon-crested Cockatoo

Large backward curving white and pink crest
Other feathers pinky-white

Distribution: Indonesia
Height: 50cm

Credit: Chris Shepherd/TSEA



Yellow-crested Cockatoo
Credit: Chris Shepherd/TSEA



Philippine Cockatoo
Credit: Chris Shepherd/TSEA



Moluccan Cockatoo
Credit: Chris Shepherd/TSEA

Probosciger aterrimus - Palm Cockatoo

Palm Cockatoo

Other Names: Kakatua raja, Kakatua hitam (Indonesia)

Distribution: Australia; West Papua, Aru Islands, Indonesia; Papua New Guinea

Physical Characteristics: Head and Body Length: 51 - 64cm

International Conservation Status:

CITES Appendix I

IUCN: LC

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Mark Auliya/TSEA

Distinguishing Features:

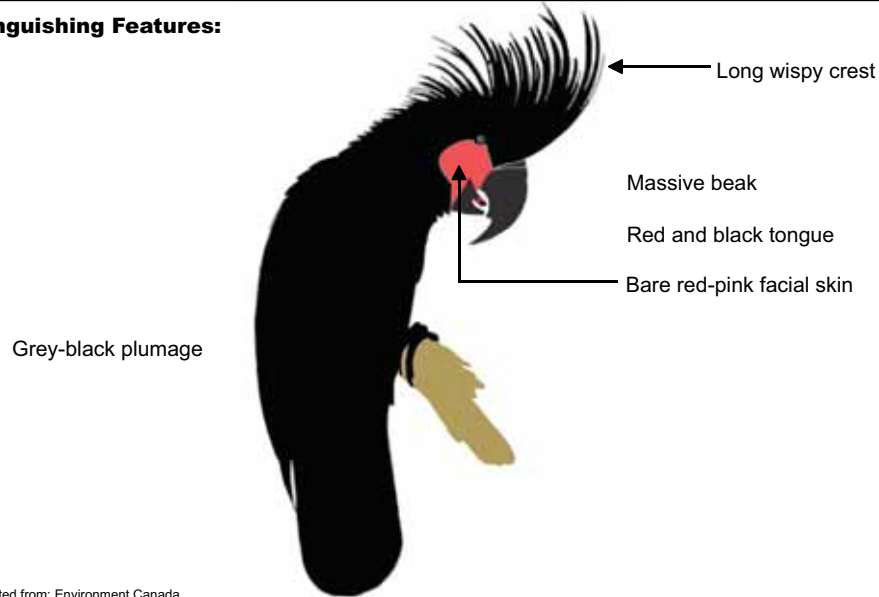


Image Adapted from: Environment Canada

Traded as: Live animals and eggs (carried on the person) for the pet trade



Young Palm Cockatoo in a Market
Credit: Chris Shepherd/TSEA



Adult Palm Cockatoo
Credit: Mark Auliya/TSEA

Similar to:

Other Black Cockatoos CITES APPENDIX II

Are only found in Australia

DO NOT have bare red-pink-facial skin

DO NOT have plain grey-black plumage

Other Black Parrots CITES APPENDIX II

Only found in Madagascar; Comoros Islands and Seychelles

DO NOT have bare red-pink-facial skin

DO NOT have crest or black beak

Eos spp. - Indonesian Lories

Indonesian Lories

Other Names: Nuri Sangir (Red & Blue Lory, Indonesia)

Distribution: Eastern Indonesia

Physical Characteristics: Length: 24 - 31cm

International Conservation Status: ^α

Eos histrio **CITES Appendix I**
remainder **CITES Appendix II**

IUCN: LC

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Blue-streaked Lory
Credit: Chris Shepherd/TSEA

Distinguishing Features:

Traded as: Live animals for the pet trade

Red and Blue Lory <i>Eos histrio</i> CITES Appendix I IUCN: EN	Red Lory <i>Eos bornea</i> CITES Appendix II IUCN: LC	Blue-eared Lory <i>Eos semilarvata</i> CITES Appendix II IUCN: LC	Violet-necked Lory <i>Eos squamata</i> CITES Appendix II IUCN: LC	Black-winged Lory <i>Eos cyanogenia</i> CITES Appendix II IUCN: VU	Blue-streaked Lory <i>Eos reticulata</i> CITES Appendix II IUCN: NT
<p>Head: 1. Purple-blue band on the back of the head (may vary in size)</p> <p>Body: 2. Broad blue band across the chest</p> <p>Tail: 3. Reddish-purple when viewed from above</p>	<p>Head: 1. Blue around the eye, no other purple on head</p> <p>Body: 2. No blue on the body, blue under base of tail</p> <p>Wing: 3. Small blue patch on each wing</p>	<p>Head: 1. Violet Blue on upper cheeks, ear area and band down side of neck</p> <p>Body: 2. Blue on abdomen and under tail</p>	<p>Head: 1. Violet blue collar round neck - varies may be very faint in some birds</p> <p>Body: 2. Blue on Abdomen and under tail</p>	<p>Head: 1. Bluish-purple band from eye to side of neck</p> <p>Body: 2. Black flanks and thighs</p> <p>Wing: 3. Black patch on wings</p>	<p>Head: 1. Bluish-purple band from eye down to base of neck</p> <p>Body: 2. Upper back blue-black streaked with violet-blue</p>
<p>Distribution: Sangir and islands in the Talaud and Nanusa groups, Indonesia.</p>	<p>Distribution: Moluccas including Buru, Seram and associated islands and the Kai Islands, Indonesia.</p>	<p>Distribution: Seram, Indonesia.</p>	<p>Distribution: Islands in the North Moluccas and West Papuan group, Indonesia.</p>	<p>Distribution: Islands in Geelvink Bay, West Papua, Indonesia.</p>	<p>Distribution: Tanimbar group, Indonesia.</p>

Loriculus galgulus - Blue-crowned Hanging Parrot

Blue-crowned Hanging Parrot

Other Names: Burung Serindit (Malaysia)

Distribution: Brunei Darussalam; Indonesia; Malaysia; Singapore; Thailand

Physical Characteristics: Length: 12cm

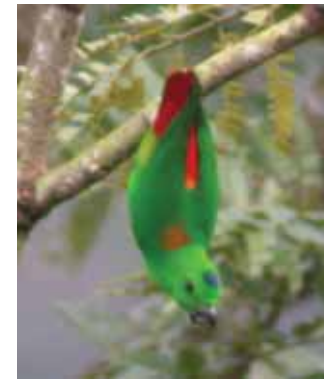
International Conservation Status:^α

CITES Appendix II

IUCN: LC

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: Yen Loong Lean

Distinguishing Features:

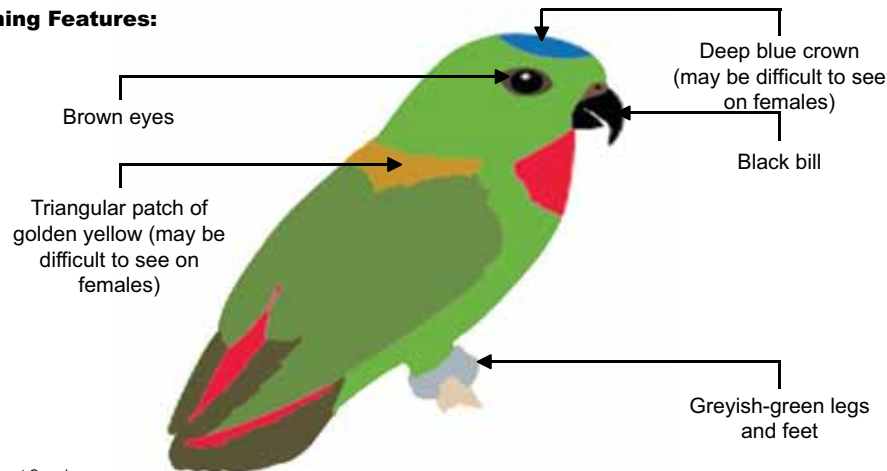


Image Source: Environment Canada

Traded as: Live animals for the pet trade



Credit: Chris Shepherd/TSEA

Similar to:

Other Hanging Parrots CITES Appendix II

DO NOT have deep blue crown

DO NOT have triangular patch of golden yellow on mantle

Budgerigar *Melopsittacus undulatus*

Length: 18cm

May be listed as Budgerigar on documentation



Image Source: Environment Canada

Lorius garrulus - Chattering Lory

Chattering Lory

Other Names: Nuri Ternate (Indonesia)

Distribution: *Lorius garrulus garrulus* - Halmahera, Weda, Ternate Islands, Indonesia
Lorius garrulus flavopalliatius - Bacan and Obi Islands, Indonesia
Lorius garrulus morotaianus - Morotai and Rau Islands, Indonesia

Physical Characteristics: Length: 30cm

Distinguishing Features:

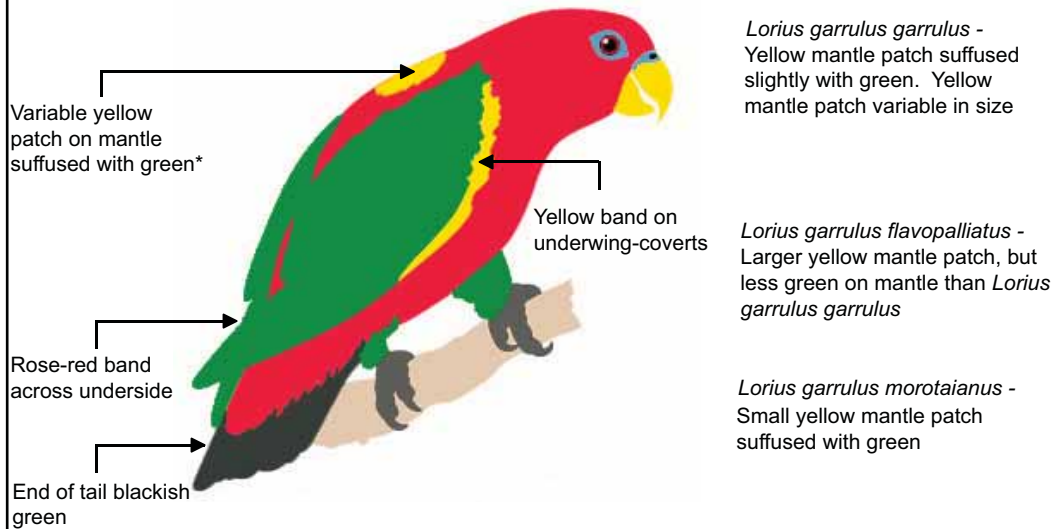
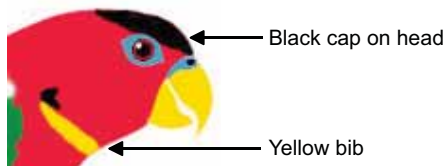


Image Source: Environment Canada (adapted)

Similar to:

Lorius chlorocercus
Yellow-bibbed Lory
CITES Appendix II



International Conservation Status:^α

CITES Appendix II

IUCN: EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Chris Shepherd/TSEA

Traded as: Live animals for the pet trade



Credit: Chris Shepherd/TSEA



Kredit Foto: Mark Auliya/TSEA

Lorius lory - Black-capped Lory

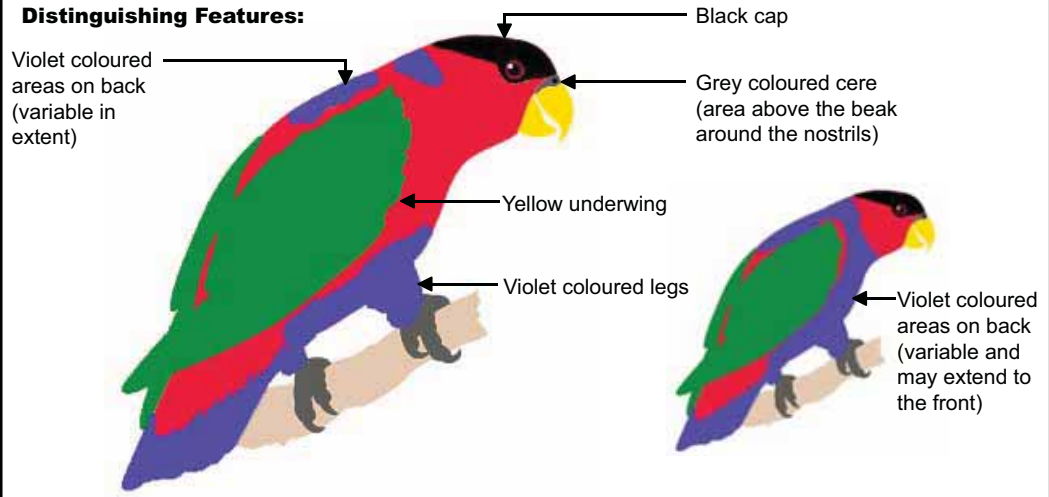
Black-capped Lory

Other Names:

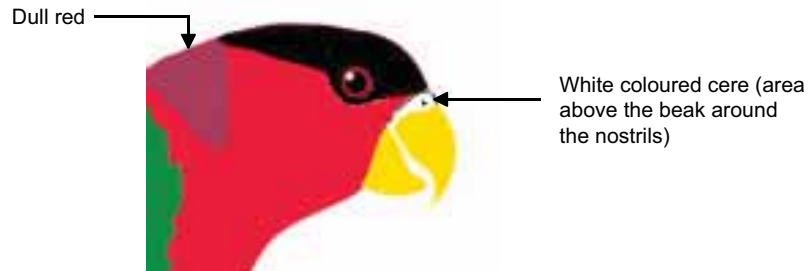
Distribution: West Irian, Indonesia; Papua New Guinea

Physical Characteristics: Length: 31cm

Distinguishing Features:



Similar to: *Lorius hypoinochrous* - Purple-bellied Lory
CITES Appendix II



International Conservation Status:^a

CITES Appendix II

IUCN: LC

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Lory Brent Stirton - Getty Images - WWF-UK

Traded as: Live animals for the pet trade.



Black-capped Lory in a market
Credit: Chris Shepherd/TSEA



Black-capped Lory
Credit: James Compton/TSEA

© TRAFFIC Southeast Asia 2008

Image Adapted from: Environment Canada

^a Check current conservation status at www.cites.org, www.iucnredlist.org and www.birdlife.org/datazone/search/species_search.html

Strigiformes - Owls

Owls

Other Names: Burung Hantu (Indonesia; Malaysia)

Distribution: Worldwide (except Antarctica)

Physical Characteristics:

Height: 16 - 84cm; Wing span: 38 - 160cm, Weight: 40g - 1.8kg

Distinguishing Features:

- Soft plumage (feathers)
- Upright posture
- Large rounded head
- Short tail
- Long legs (may be hidden by plumage)
- Reversible outer toe - can face forwards or backwards
- Tend to be dull in colour



Credit: Chris Shepherd/TSEA

NOTE: Identifying owl chicks to species is very difficult.



Credit: Chris Shepherd/TSEA

International Conservation Status:

All are **CITES Appendix II** except for 5 species listed in **CITES Appendix I**

- Heteroglaux blewitti* - Forest Owlet (India)
- Mimizuku gurneyi* - Giant Scop's Owl (Philippines)
- Ninox natalis* - Christmas Island Hawk-Owl (Christmas Island)
- Ninox novaeseelandiae undulata* Boobook Owl (Norfolk Island)
- Tyto soumagnei* - Madagascar Red Owl (Madagascar)

IUCN: Varies - up to CR

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Bubo sumatranus (Barred Eagle Owl)
Credit: Claire Beastall

Traded as: Live animals, body parts for traditional medicine/magic



Tyto alba (Barn Owl) for sale in a market
Credit: Chris Shepherd/TSEA



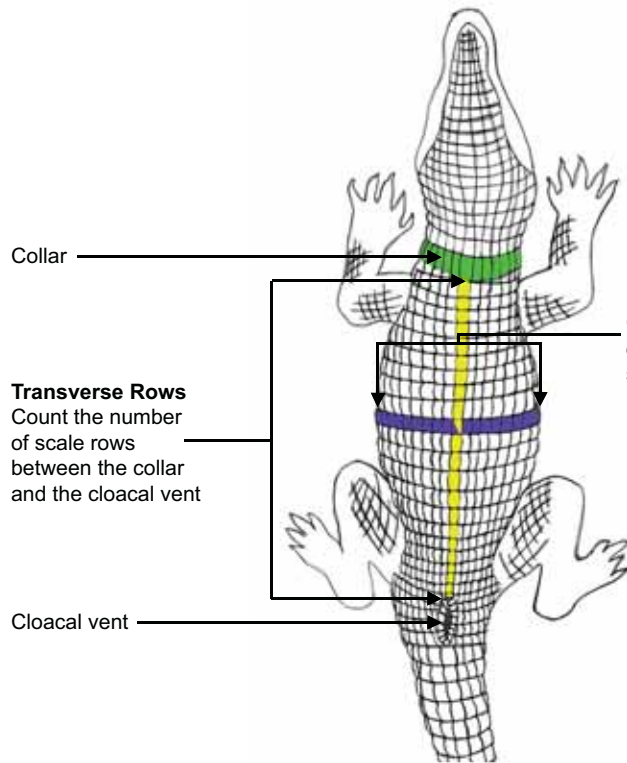
Ninox scutulata (Brown Hawk Owl) for sale in a market
Credit: Chris Shepherd/TSEA



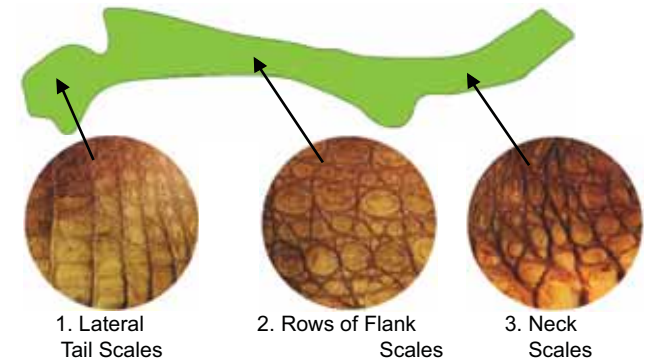
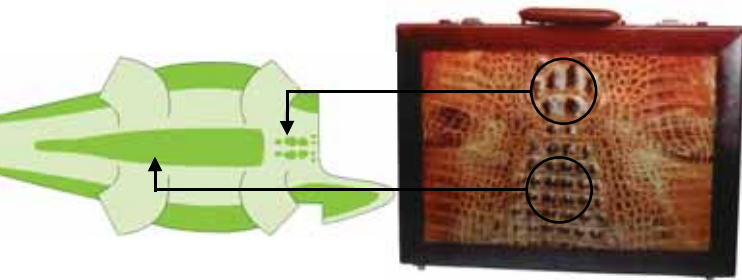
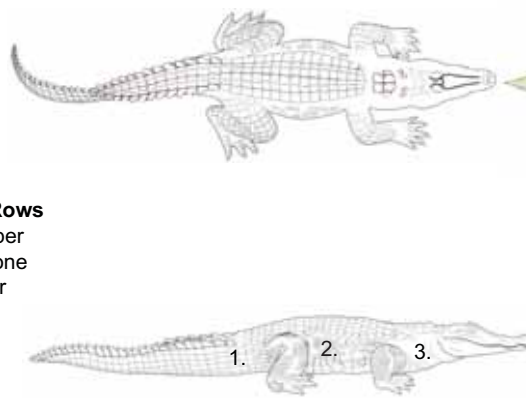
Ketupa ketupu (Buffy Fish Owl) for sale in a market
Credit: Chris Shepherd/TSEA

Crocodylia spp. - Hides

All at least **CITES Appendix II**

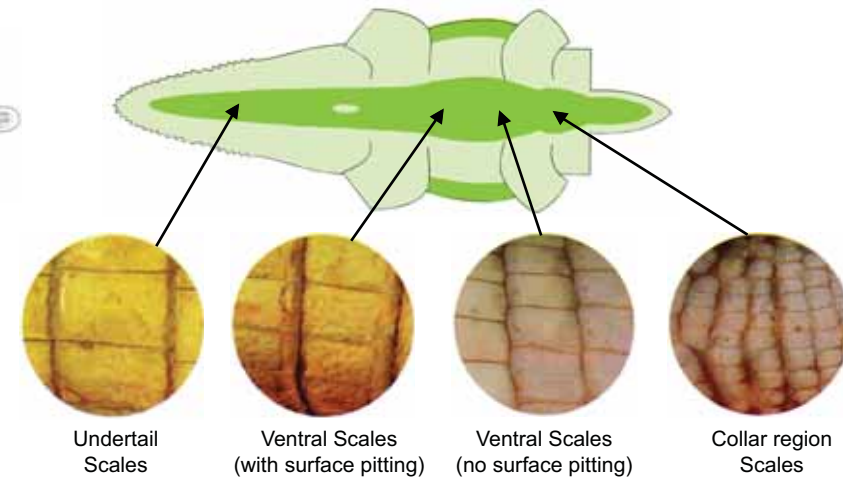
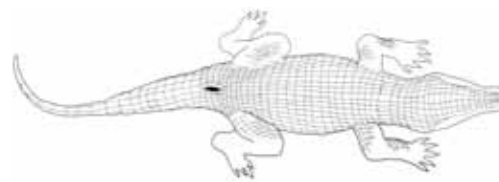


Longitudinal Rows
Count the number of scales from one side to the other



Identification of Crocodile skins

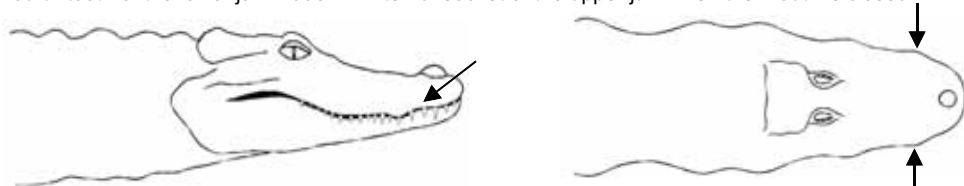
Species	Transverse Rows	Longitudinal Rows
<i>Alligator mississippiensis</i>	29 - 34	12 - 14
<i>Caiman crocodilus</i>	20 - 24	12 - 14
<i>Crocodylus niloticus</i>	26 - 30	14 - 20
<i>Crocodylus novaeguinea</i>	22 - 28	12 - 18
<i>Crocodylus mindorensis</i>	22 - 25	12 - 14
<i>Crocodylus porosus</i>	31 - 35	16 - 19
<i>Crocodylus siamensis</i>	30 - 34	14 - 16
<i>Tomistoma schlegelii</i>	22 - 24	12 - 14



Alligators & Caiman

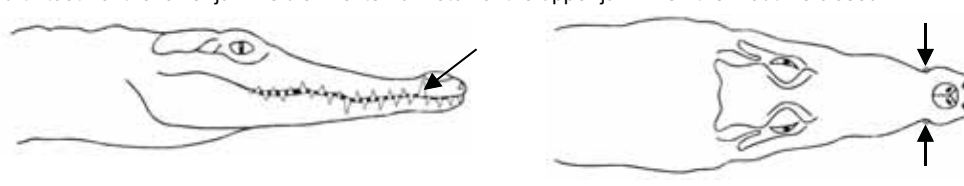
Alligators and Caimans

Fourth tooth of the lower jaw hidden in internal socket of the upper jaw when the mouth is closed



Crocodiles

Fourth tooth of the lower jaw visible in external notch of the upper jaw when the mouth is closed



Alligator mississippiensis American Alligator

CITES Appendix II

IUCN: LC

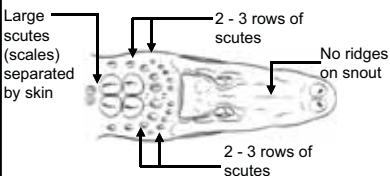
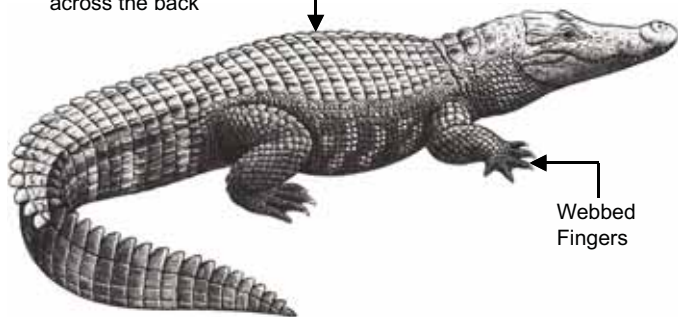
Other names: American Alligator, Gator (English)

Distribution: United States of America

Physical

Characteristics: Length: Up to 6m - usually 4.8m.

8 - 10 scutes (scales)
across the back



Alligator sinensis Chinese Alligator

CITES Appendix I

IUCN: CR

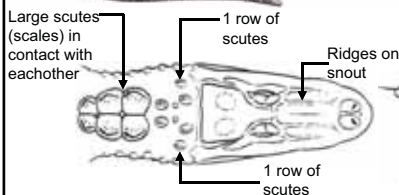
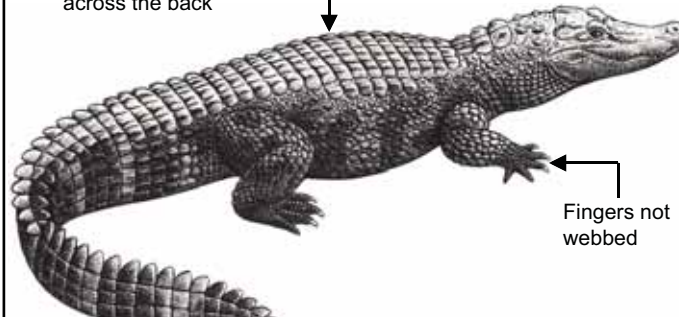
Other names: Chinese Alligator (English), Yangtze Alligator (English), E Yu, T'uo, Tou Lung, Yow Lung

Distribution: China (Anhui, Jiangsu, Zhejiang)

Physical

Characteristics: Length: Up to 1.8m

6 scutes (scales)
across the back



Caiman crocodilus Spectacled Caiman

CITES Appendix II

IUCN: LR

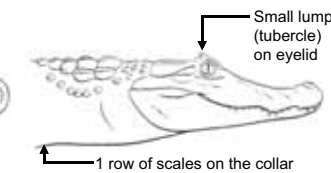
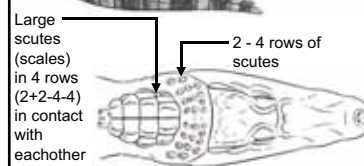
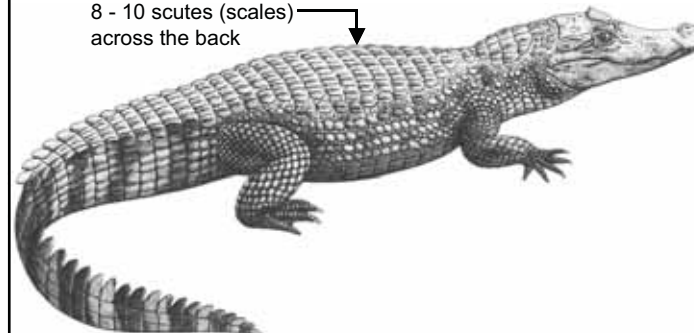
Other names: Spectacled Caiman, Common Caiman (English)

Distribution: Brazil; Colombia; Costa Rica; Ecuador; El Salvador; French Guiana; Guatemala; Guyana; Honduras; Mexico; Nicaragua; Panama; Peru; Suriname; Trinidad and Tobago; Venezuela

Physical

Characteristics: Length: Up to 2.7

8 - 10 scutes (scales)
across the back



© TRAFFIC Southeast Asia 2008

All Images Credit: Environment Canada

Check current conservation status at www.cites.org, www.iucnredlist.org

May 2008



Crocodylus novaeguineae & Crocodylus mindorensis

Crocodylus novaeguineae New Guinea Crocodile

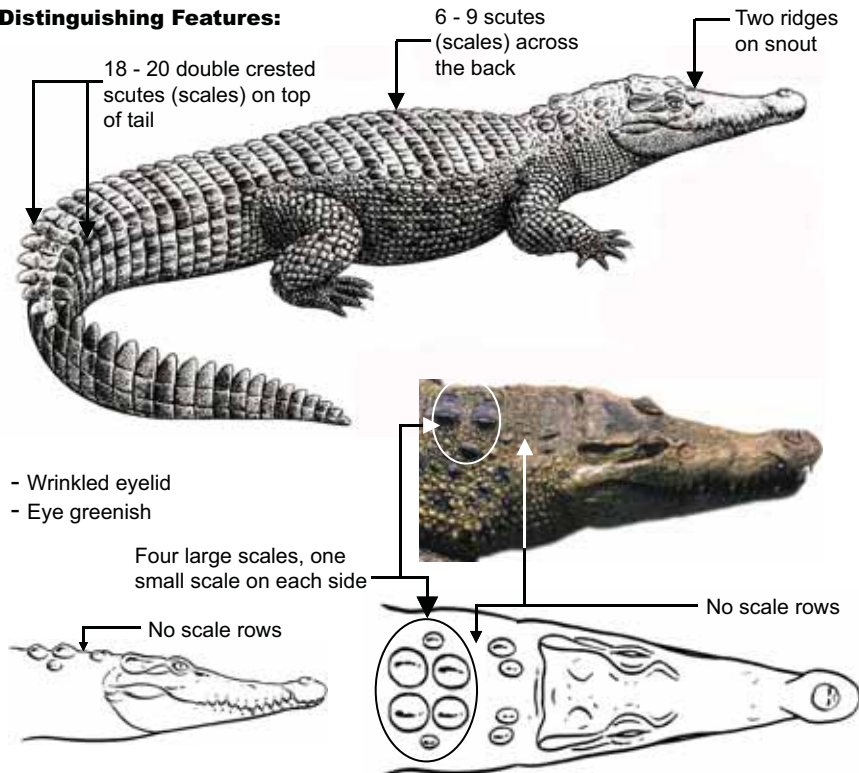
CITES Appendix II
IUCN: LC

Other names: New Guinea Crocodile (English), Buaya air tawar, Pukpuk, Wahne huala (Indonesia, Papua New Guinea)

Distribution: Indonesia (West Irian); Papua New Guinea

Physical Characteristics: Length: Up to 3.5m.

Distinguishing Features:



Crocodylus mindorensis Philippine Crocodile

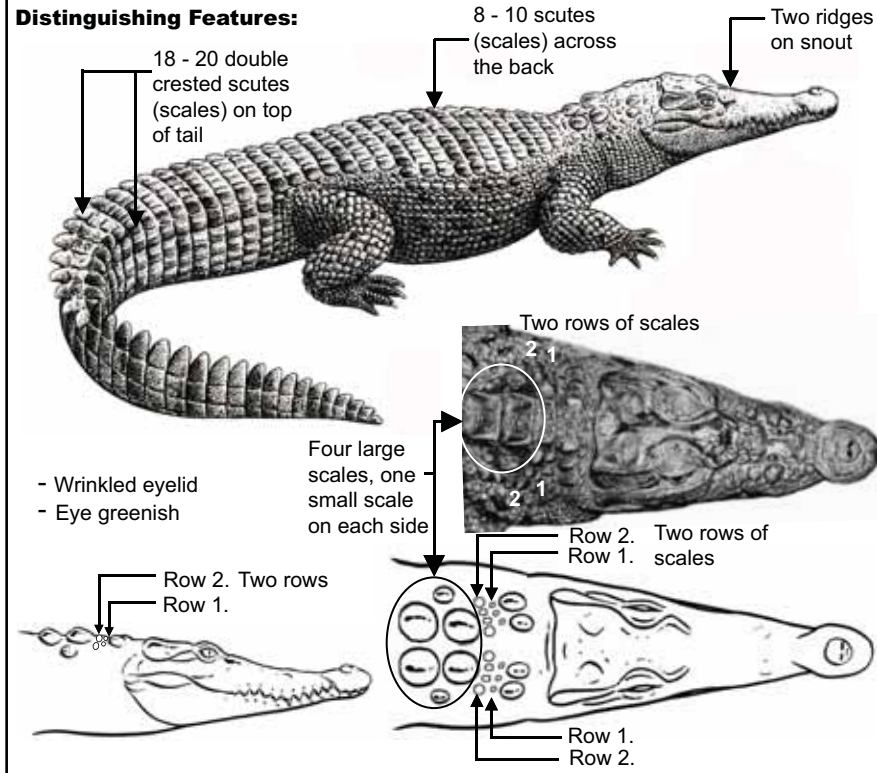
CITES Appendix I
IUCN: CR

Other names: Philippine Crocodile (English)

Distribution: Philippines

Physical Characteristics: Length: Up to 3m.

Distinguishing Features:



National Protection in Singapore:
Endangered Species
(Import and Export) Act, 2006

Traded as:
Skins and live animals
for the pet trade.



Crocodile skin on sale
Credit: TRAFFIC Southeast Asia

Crocodylus porosus & Crocodylus siamensis

Crocodylus porosus Estuarine Crocodile

CITES Appendix I

Except for populations in Australia; Indonesia and Papua New Guinea: **Appendix II**

IUCN: LC

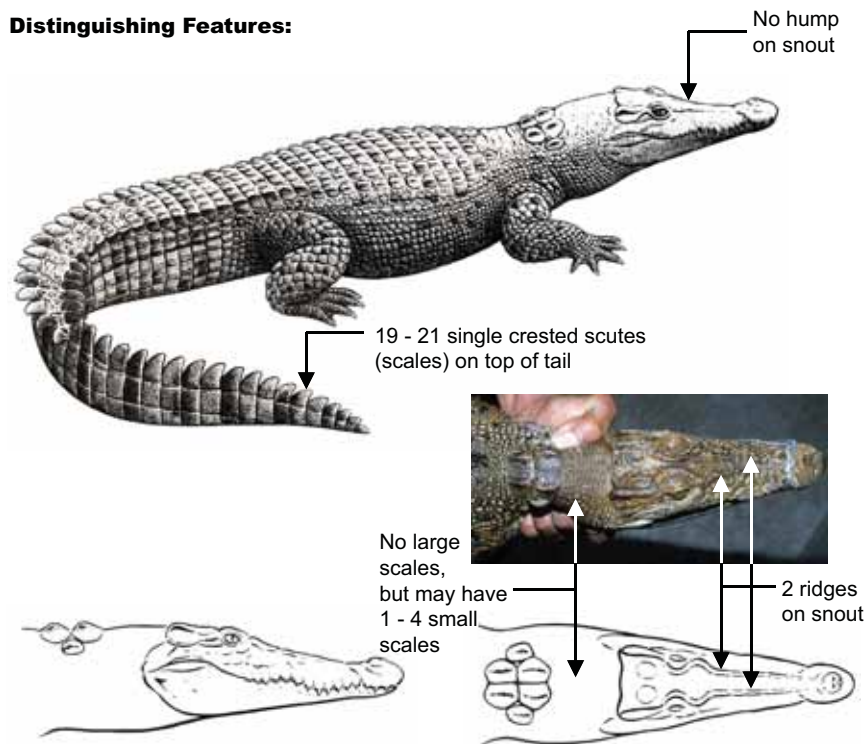
Other Names: Estuarine Crocodile, Saltwater Crocodile (English), Buaya muara (Indonesia), Baya, Pukpuk, Kone huala (Papua New Guinea), Jara Kaenumkem (Thailand)

Distribution: Australia; Bangladesh; Brunei Darussalam; Cambodia; India; Indonesia; Malaysia; Myanmar; Palau; Papua New Guinea; Philippines; Singapore; Solomon Islands; Sri Lanka; Thailand; Vanuatu; Viet Nam

Physical

Characteristics: Length: Up to 7m.

Distinguishing Features:



Crocodylus siamensis Siamese Crocodile

CITES Appendix I

IUCN: CR

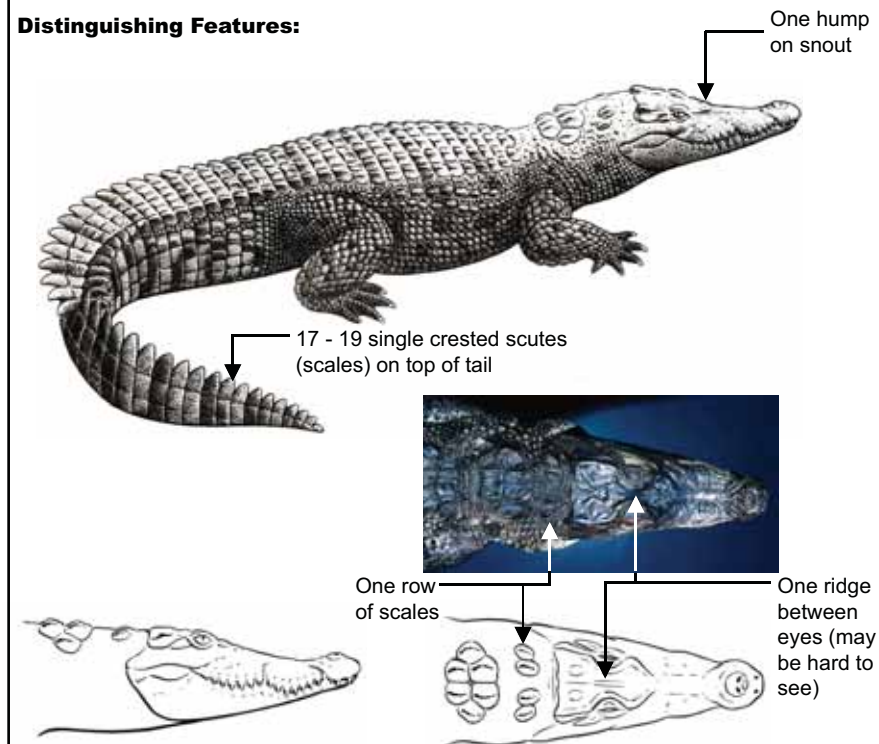
Other Names: Siamese Crocodile (English), Buaya kodok (Indonesia), Jara Kaenumchued (Thailand)

Distribution: Cambodia; Indonesia (Kalimantan); Lao PDR; Malaysia (Sarawak); Thailand; Viet Nam

Physical

Characteristics: Length: Up to 4m.

Distinguishing Features:



National Protection Status in Singapore:

Endangered Species (Import and Export) Act, 2006

Wild Animals and Birds Act, 1965 (*Crocodylus porosus*)

Traded as:

Skins and live animals for the pet trade.



Baby Crocodile for sale in a market
Credit: TRAFFIC Southeast Asia



Crocodile skin bags
Credit: Mark Auliya

Tomistoma schlegelii - False Gharial

False Gharial

Other Names: Tomistoma (English), Buaya sumpit (Indonesia), Julong julong (Malaysia), Takong (Thailand),

Distribution: Indonesia (Kalimantan, Sumatra); Malaysia (Peninsular Malaysia, Sarawak)

Physical Characteristics: Length: Up to 5 m

International Conservation Status:

CITES Appendix I

IUCN: EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Mark Auliya

Distinguishing Features:



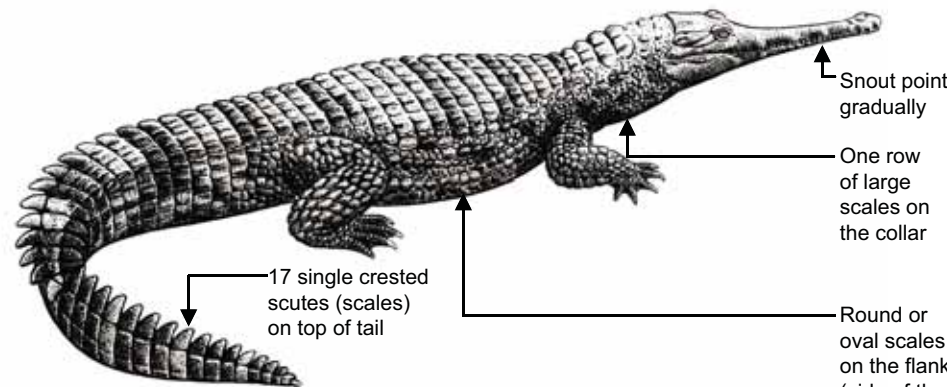
Credit: Mark Auliya/TSEA

- Olive-brown colour with large distinct black blotches from the snout to the tail (blotches may fade with age).



- Eyes yellowish brown

Credit: Mark Auliya/TSEA

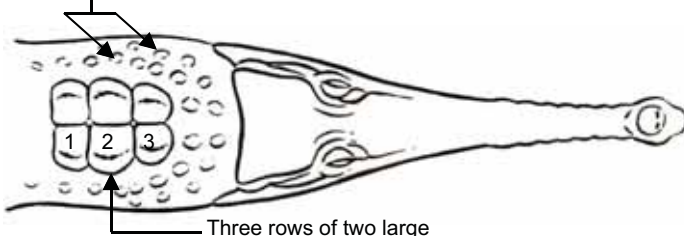


Snout points gradually

One row of large scales on the collar

Round or oval scales on the flank (side of the body)

Two rows of smaller scutes (scales)



Three rows of two large scutes (scales)



19 - 20 teeth on lower jaw

Traded as: Live animals for the pet trade, usually when young



Young False Gharial
Credit: WWF-Canon / Alain COMPOST



Adult Female False Gharial
Credit: Claire Beasall

Uromastyx spp. - Spiny-tailed Lizards

Spiny-tailed Lizards

Other Names: Dab Lizard, Mastigure (English)

Distribution: Northwest India to southwestern Asia and the Arabian Peninsula to Sahara of Africa.

Physical Characteristics: Length: up to 91.5cm

International Conservation Status:^α
All *Uromastyx* spp. are listed in
CITES Appendix II

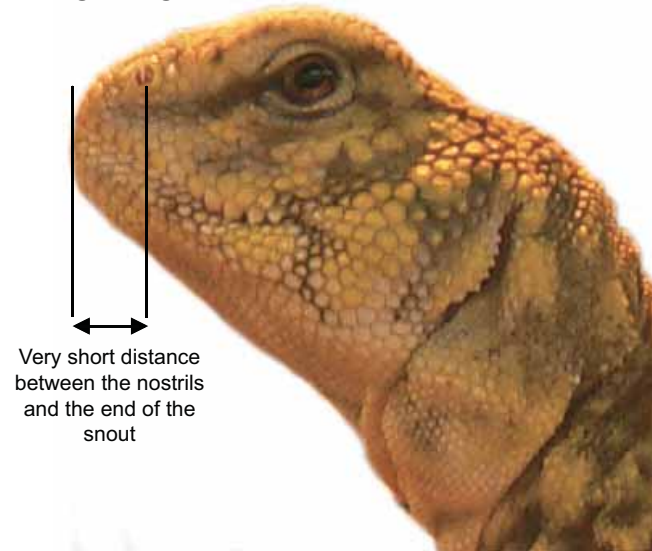
IUCN: Varies from CR - LR/LC

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Mark Auliya/TSEA

Distinguishing Features:



Very short distance between the nostrils and the end of the snout

Credit: Mark Auliya/TSEA

- Relatively flat, spiny tail
- Body relatively flat
- May have lateral skin folds



Credit: Mark Auliya/TSEA

Traded as:

Live animals for the pet trade and also for traditional medicine



Credit: Mark Auliya/TSEA

Similar to:

Spiny-tailed iguanid lizards from the Americas and Madagascar

Do not show the combination of features listed above



Credit: Anthony B. RATH/WWF-Canon

Australian agamid lizards

Do not show the combination of features listed above



Credit: Claire Beastall



Credit: Mark Auliya/TSEA

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Phelsuma spp. - Day Gecko species

Day Gecko species

Other Names:

Distribution: Andaman Islands (India); Comoro Islands; Kenya; Madagascar; Mauritius; Reunion; Rodrigues; Seychelles; Tanzania

Physical Characteristics: Length: 7.6 - 30.5cm

International Conservation Status:^α

All *Phelsuma* spp. are listed in **CITES Appendix II**

IUCN: Varies from CR - LR/LC

National Protection in Singapore:

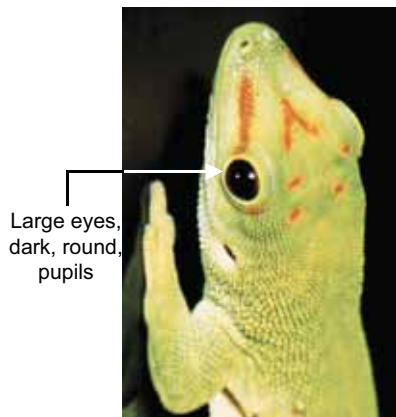
Endangered Species (Import and Export) Act, 2006



Credit: Eugène Bruins

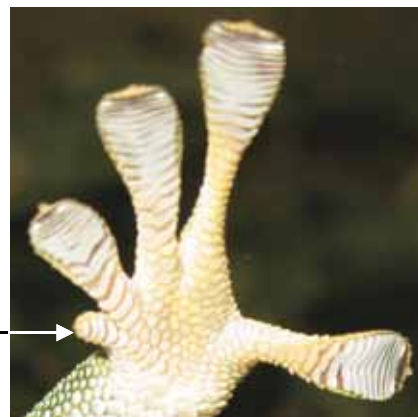
Distinguishing Features:

- Most are brightly coloured, usually green
- Active mainly during the day
- Large eyes, dark, round pupils
- Inner toe reduced



Large eyes, dark, round pupils

Credit: Eugène Bruins



Inner toes reduced

Credit: Eugène Bruins

Traded as:

Live animals for the pet trade

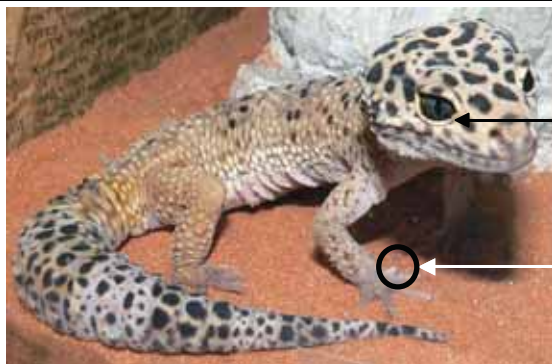


Selection of *Phelsuma* spp. available for purchase in a pet shop
Credit: Mark Auliya/TSEA

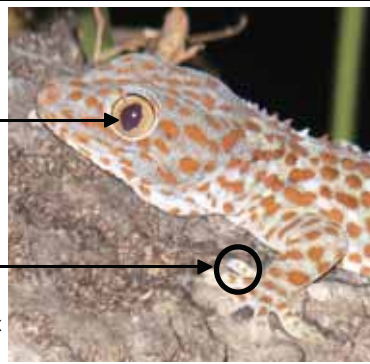
Similar to:

Other geckos

- Usually dull in colour
- Active mainly at night
- Pupils not round
- Inner toe not reduced



Leopard Gecko (*Eublepharis macularius*). Credit: Mark Auliya/TSEA



Tokay Gecko (*Gekko gekko*). Credit: Mark Auliya/TSEA

Pupils not round

Inner toes not reduced



Phelsuma quadricellata on sale in a pet shop
Credit: Mark Auliya/TSEA

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Gekko gekko - Tokay Gecko

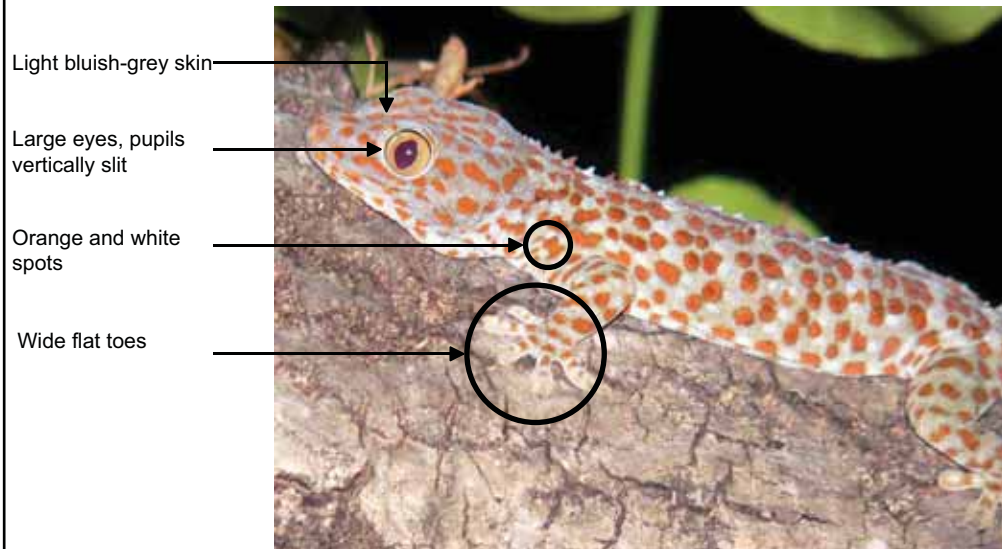
Tokay Gecko

Other Names:

Distribution: Throughout eastern tropical Asia

Physical Characteristics: Total length: 20 - 40cm, Weight: 150 - 300g

Distinguishing Features:



Credit: Mark Auliya/TSEA

Similar to:

Other Geckos - other geckos do not have distinctive orange spots. The Tokay is the second largest species of gecko.

International Conservation Status:^α

Not listed

National Protection in Singapore:

Wild Animals and Birds Act, 1965



Credit: Mark Auliya/TSEA

Traded as: Dried or stored in liquid for use in Traditional Medicine



Tokay Gecko for use in Traditional Medicine

Credit: TRAFFIC Southeast Asia



Tokay Gecko in Wine

Credit: TRAFFIC Southeast Asia



Tokay Gecko for use in Traditional Medicine

Credit: TRAFFIC Southeast Asia



Tokay Gecko for use in Traditional Medicine

Credit: Mark Auliya/TSEA



^αCheck current conservation status at www.cites.org, www.iucnredlist.org

Varanus spp. - Monitor Lizard spp.

Varanus spp.

Other Names: Biawak (Malaysia)

Distribution: Africa; Arabia; South Asia; Southeast Asia; East Indies; Australia; Marshall, Caroline and Fiji Islands.

Physical Characteristics: Length: Between 15cm - 3m

International Conservation Status:^α

CITES Appendix II except for *Varanus bengalensis*, *V. flavescens*, *V. griseus*, *V. komodoensis*, *V. nebulosus* which are **Appendix I**

IUCN: Only 3 listed - *V. komodoensis*, *V. olivaceus*: **VU**, *V. flavescens*: **LR**

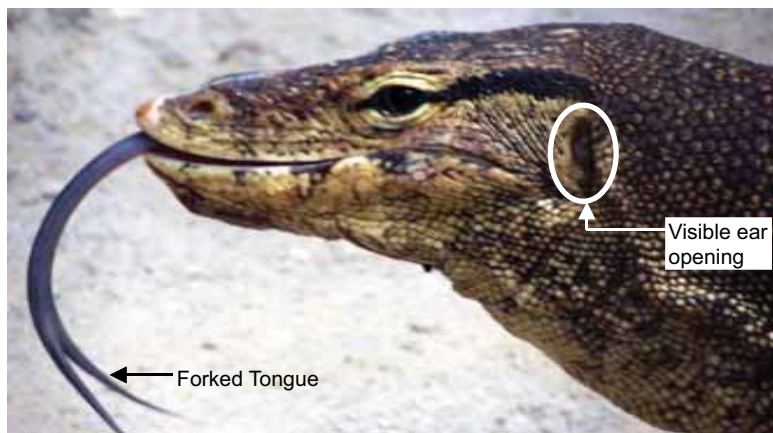
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Credit: Mark Auliya

Distinguishing Features:



Varanus salvator adult Credit: Claire Beasall



Varanus salvator juvenile Credit: Claire Beasall

- Muscular tail
- Powerful limbs and sharp claws
- Long neck
- Narrow head and pointed snout

Traded as:



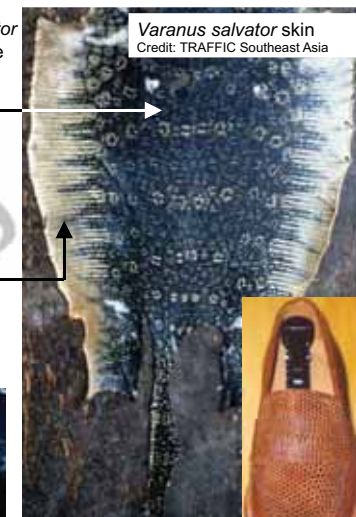
Close-up of back skin of Monitor Lizard viewed through magnification.
Actual size of scales: 1mm in juvenile;
2 - 3mm in adult

Varanus prasinus (Green Tree Monitor) from Australia; Indonesia (West Irian) and Papua New Guinea is commonly found in the pet trade.



Varanus prasinus in trade Credit: Mark Auliya/TSEA Length: Up to 80cm

The skin of *Varanus salvator* is commonly found in trade



Varanus salvator skin Credit: TRAFFIC Southeast Asia

Characteristic raised keeled scales each surrounded by small granular scales found on the back of the animal



Varanus salvator in wine Credit: Claire Beasall



Shoe made from Monitor Lizard skin Credit: TRAFFIC Southeast Asia



Varanus salvator in trade Credit: Mark Auliya

Ptyas mucosus - Oriental Rat Snake

Oriental Rat Snake

Other Names: Banded Ratsnake (English)

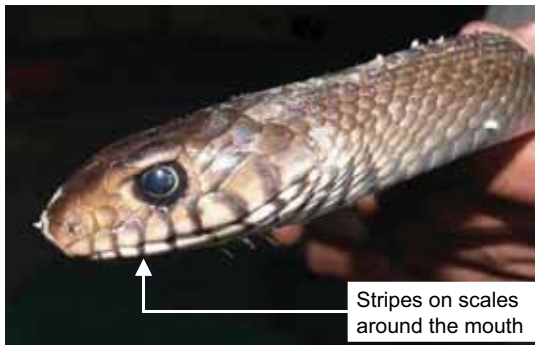
Distribution: Afghanistan; Bangladesh; Cambodia; China; India; Indonesia; Iran; Lao PDR; Nepal; Malaysia; Myanmar; Pakistan; Taiwan; Thailand; Turkmenistan; Viet Nam

Physical Characteristics: Length: 320cm

Distinguishing Features:

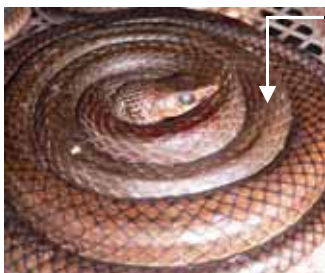


Banded pattern on the body (difficult to see in darker animals)



Stripes on scales around the mouth

Similar to: *Ptyas korros* - Indochinese Rat Snake
Not listed on CITES



No banded pattern on the body



No stripes on scales around the mouth

Distribution: Bangladesh; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Singapore; Taiwan; Thailand; Viet Nam

International Conservation Status:

CITES Appendix II

IUCN: Not listed

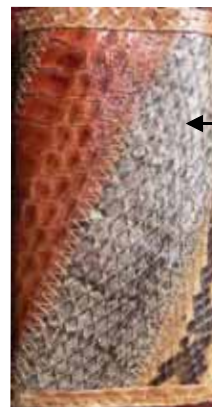
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

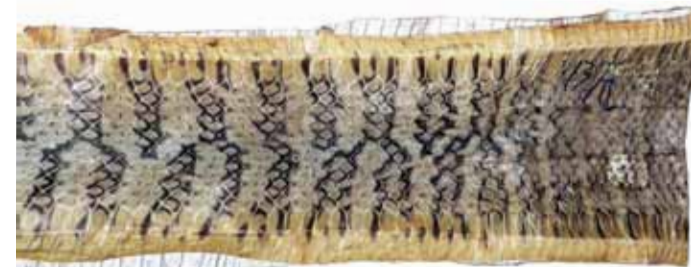


Ptyas mucosus
Credit: Mark Auliya/TSEA

Traded as: Skins, meat and gall bladders for traditional medicine



Ptyas mucosus leather
Credit: Mark Auliya/TSEA



Ptyas mucosus skin
Credit: Mark Auliya/TSEA



Ptyas mucosus meat
Credit: Mark Auliya/TSEA



Ptyas mucosus gall bladders
Credit: Mark Auliya/TSEA

Ophiophagus, Naja spp. - Cobras

Cobras

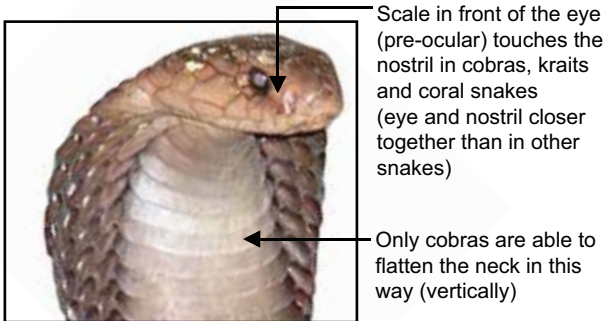
Other Names:

Distribution: Africa and Asia

Physical Characteristics:

Length: Up to 585cm

Distinguishing Features:



Credit: Mark Auliya

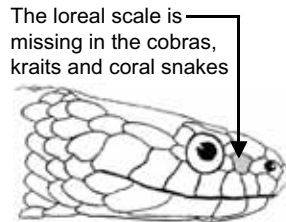
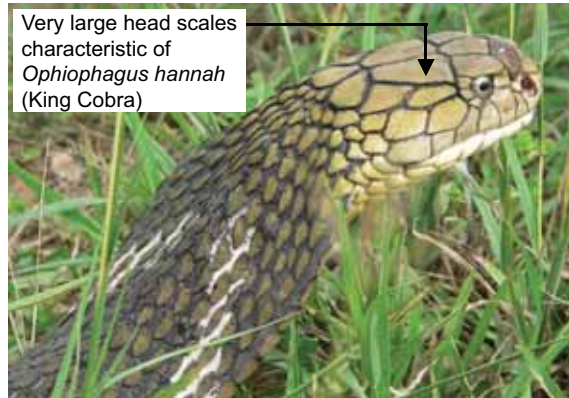


Image adapted from: US Fish and Wildlife



Coelognathus (Elaphe) radiata (Radiated Ratsnake) flattens the neck dorso-ventrally to mimic a cobra

Credit: Claire Beastall



Credit: Mark Auliya



Variation in pattern on the back of the neck of *Naja kaouthia* (Monocellate/Monocled Cobra)

Credit: Mark Auliya

International Conservation Status:

The following Southeast Asian Cobra species are listed in **CITES Appendix II**:

- Ophiophagus hannah* (King Cobra),
- Naja kaouthia* (Monocellate Cobra),
- Naja mandalayensis* (Burmese Spitting Cobra),
- Naja philippinensis* (Northern Philippine Cobra),
- Naja samarensis* (Southeastern Philippine Cobra),
- Naja siamensis* (Indochinese Spitting Cobra),
- Naja sputatrix* (Javan Spitting Cobra),
- Naja sumatrana* (Equatorial Spitting Cobra)

IUCN: Not listed

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Naja sputatrix (Javan Spitting Cobra)

Credit: Mark Auliya

Traded as: Skins, meat and gall bladders for traditional medicine



Skinning Cobras



Collecting blood from *Ophiophagus hannah*



Dead cobra at a market



Cobra gall bladder (fresh)



Cobra gall bladder (dried)



Cobra skin

All photographs credit to: Mark Auliya/TSEA

Pythonidae - Pythons

Pythons

Other Names:

Distribution: Africa; Asia and Australia (only found in the Old World)

Physical

Characteristics: Length: Up to 10m

International Conservation Status:^α

CITES Appendix II except *Python molurus molurus* (Indian Rock Python) which is listed in **CITES Appendix I**

IUCN: *Python molurus* - LR

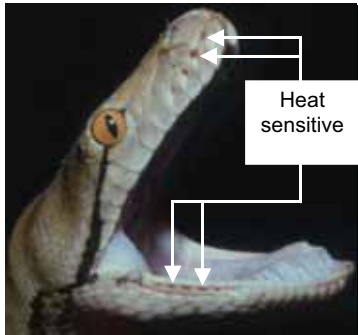
National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006
Wild Animals and Birds Act, 1965



Python breitensteini
Credit: Mark Auliya

Distinguishing Features:



Heat sensitive

Credit: Mark Auliya



Credit: Mark Auliya

Two small spurs (vestigial limbs) found either side of the cloaca (body opening above the base of the tail)

Traded as: Skins, meat and live for the pet trade



Python reticulatus in the meat trade
Credit: Bounma Vongxay



Python Skin Shoes
Credit: TRAFFIC Southeast Asia



Morelia viridis (Green Tree Python) from Australia; Indonesia (West Irian) and Papua New Guinea is commonly found in the pet trade.
Credit: WWF-Canon / Martin HARVEY



Python reticulatus is commonly found in the skin trade
Credit: Chris Shepherd/TSEA



Python curtus and *Python brongersmai*
Credit: Chris Shepherd/TSEA



Confiscated Python Skin
Credit: TRAFFIC Southeast Asia

Similar Boidae spp.

Six Boa species are listed in **CITES Appendix I**, all others are listed in **CITES Appendix II**. They are only found in Central and South America, Madagascar and the Indo-Pacific.

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Carettochelys insculpta - Pig-nosed Turtle

Pig-nosed Turtle

Other Names: Labi-labi moncong babi (ID), Budu Susa (Fly River region, PNG), Garr (Morehead River region, PNG)

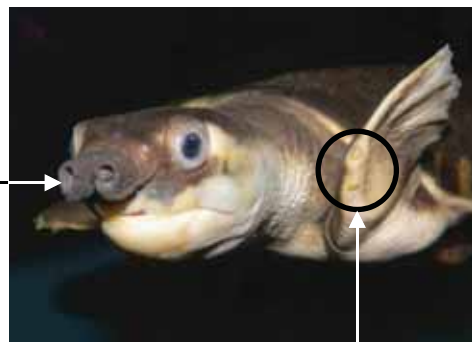
Distribution: Southern Rivers, West Papua (Indonesia and Papua New Guinea), Northern Territories (Australia)

Physical Characteristics: Carapace Length: Up to 55cm

Distinguishing Features: Carapace (upper shell) covered with leather



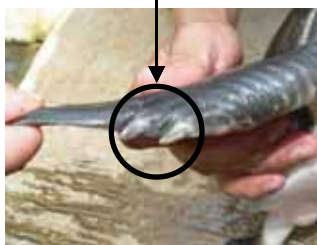
Tubular nostrils



Flipper-like front limbs each with two claws



White patches
White edge



Similar to: Soft Shell Turtle
No Soft Shell Turtle has tubular nostrils or flipper-like front limbs with two claws

International Conservation
CITES Appendix II

IUCN: VU

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Chris Shepherd/TSEA

Traded as: Live animals for the pet trade, often as young animals also as meat



Hatchling Pig-nosed Turtle
Credit: James Compton/TSEA



Hatchling Pig-nosed Turtle
Credit: Mark Auliya/TSEA



Pig-nosed Turtle meat
Credit: James Compton/TSEA



Sub-adult Pig-nosed Turtle
Credit: Chris Shepherd/TSEA



Adult Pig-nosed Turtle
Credit: Mark Auliya/TSEA

Chelus fimbriatus - Matamata Turtle

Matamata Turtle

Family: Chelidae

Other Names:

Distribution: Bolivia; Brazil; British Guiana; Colombia; Ecuador; French Guiana; Peru; Surinam; Venezuela

Physical

Characteristics: Top shell (carapace) length: Up to 44.9cm

International Conservation Status:
Not listed^a

IUCN: Not listed

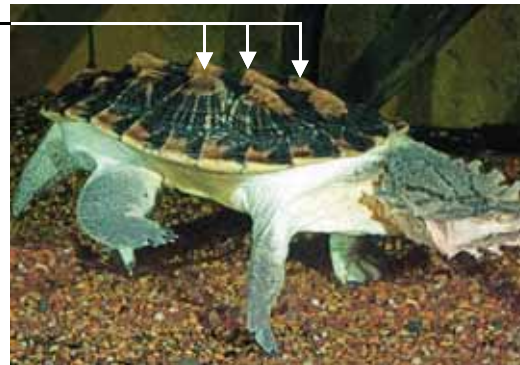
National Protection in Singapore:
Not listed (however this species is not approved for sale in accordance with the Animals and Birds (Pet Shop and Exhibition) Rules, 2004)



Distinguishing Features:



Three raised keels run along the top shell (carapace)

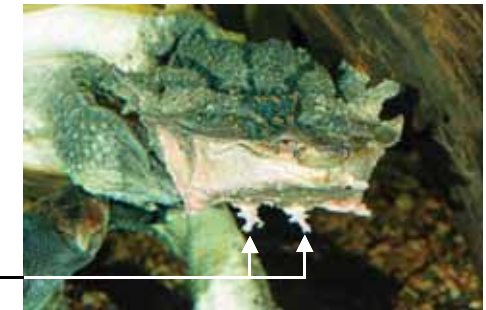


- Top shell (carapace) brown or black in colour
- Back of top shell - heavily serrated
- Head, neck, legs and tails greyish brown in adults

Two barbels on the chin

Traded As:

Live animals for the pet trade



Similar To:

No other species

Cheloniidae and Dermochelyidae - Marine Turtles

Marine Turtles

5 species are found in Southeast Asia:

- Dermochelidae:** *Dermochelys coriacea* - Leatherback Turtle
Cheloniidae: *Eretmochelys imbricata* - Hawksbill Turtle
Chelonia mydas - Green Turtle
Caretta caretta - Loggerhead Turtle
Lepidochelys olivacea - Olive Ridley Turtle

Physical

Characteristics: Carapace (Top shell) Length: Up to 150cm, Weight: Up to 950kg

International Conservation Status:^α

**All Marine Turtles are listed in
 CITES: Appendix I**

IUCN: CR - EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / Jürgen FREUND

Distinguishing Features:

- Front limbs of all are paddle-shaped.
- Claws (where present) are on the front edge of the front limb.
- Head and limbs cannot withdraw into the shell

Cheloniidae

Shell covered with scutes (scales).



1 - 2 claws on the front edge of front limb.

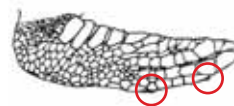


Image Source: Environment Canada

Dermochelyidae

Top shell (carapace) has seven keels (ridges) and is covered with leather.



Front limb has no claws.

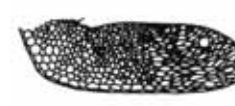


Image Source: Environment Canada

Hatchlings



Leatherback Turtle
 Credit: WWF-Malaysia / Ken Scriven



Green Turtle
 Credit: WWF-Malaysia / Ken Scriven



Hawksbill Turtle
 Credit: Chris Shepherd / TSEA



Stuffed Hawksbill Turtle
 Credit: Chris Shepherd/TSEA



Hawksbill Turtle Shell
 Credit: Chris Shepherd/TSEA

Traded as:

Live animals, meat, eggs, stuffed whole animals, shell products (known as Bekko) such as jewellery, spectacle frames etc.



Bekko items
 Credit: Julia Ng/TSEA



Green Turtle Hatchlings for sale
 Credit: Chris Shepherd/TSEA



Marine Turtle meat
 Credit: James Compton/TSEA



Marine Turtle Eggs for sale
 Credit: Chris Shepherd/TSEA

Eggs:

Round and white (like a ping-pong ball)

Egg Diameter:

<i>Dermochelys coriacea</i> :	5.1 - 5.5cm
<i>Chelonia mydas</i> :	4.0 - 4.6cm
<i>Caretta caretta</i> :	3.9 - 4.3cm
<i>Lepidochelys olivacea</i> :	3.7 - 4.2cm
<i>Eretmochelys imbricata</i> :	3.2 - 3.6cm

Eretmochelys imbricata - Hawksbill Turtle

Hawksbill Turtle

Other Names: Penyu Karah (MY), Penyu Sisik (ID)

Distribution: Atlantic: eastern central, northeast, northwest, southeast, southwest, western central;
Indian Ocean: eastern and western;
Mediterranean and Black Sea;
Pacific: eastern central, northwest, southeast, southwest, western central

Physical Characteristics: Carapace (Shell) length: 62 - 114cm, Weight: 35 - 127kg

International Conservation Status:^α

CITES: Appendix I

IUCN: CR

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

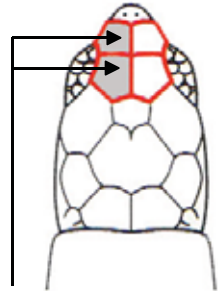


Credit: WWF-Canon / Cat HOLLOWAY

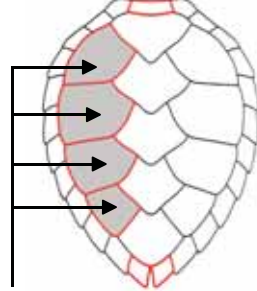
Distinguishing Features:



Beak-like upper jaw[#]



2 pairs of prefrontal scales (between the eyes)*

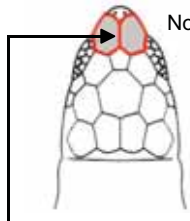


4 pairs of costal scutes (scales)*
Thick overlapping scutes on carapace (upper shell)*

Similar to:

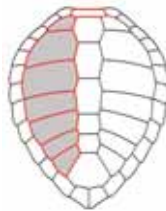
Chelonia mydas - Green Turtle
CITES: Appendix I

No beak-like jaw



Only 1 pair of prefrontal scales (between the eyes)*

Lepidochelys olivacea - Olive Ridley Turtle
CITES: Appendix I



6 or more pairs of costal scutes*
Marginal scutes on carapace do not overlap*

Traded as: Live animals, meat, eggs, stuffed whole animals, shell products (known as Bekko) such as jewellery, spectacle frames etc.



Close up of Hawksbill Turtle Scutes
Credit: Chris Shepherd/TSEA



Stuffed Young Hawksbill Turtle
Credit: Chris Shepherd/TSEA



Stuffed Adult Hawksbill Turtle
Credit: Chris Shepherd/TSEA



Bekko Fan
Credit: Julia Ng/TSEA



Bekko Hair Comb
Credit: Julia Ng/TSEA

Batagur spp.

Batagur baska - River Terrapin

Other Names: Four-toed Terrapin (English), Tuntong, Tuntong Laut (Malaysia), Tungtung (Indonesia)

Distribution: Bangladesh; Cambodia; India; Indonesia; Malaysia; Myanmar. Extinct in Singapore; Thailand; Viet Nam

Physical Characteristics: Length: up to 60cm

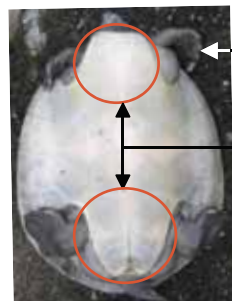
Distinguishing Features:

- Four claws on front feet
- Top shell (carapace) colour varies from dark grey to black, females may be brown
- Head blackish-grey in colour (no reddish shades)



Upturned snout
Serrated jaws

Credit: Mark Auliya/TSEA



Four claws on front feet
Front and back of plastron narrow

Credit: Sabine Schoppe
Bottom shell (plastron)



Credit: Mark Auliya/TSEA

Top shell (carapace)

Batagur (Callagur) borneoensis - Painted Terrapin

Other Names: Three-striped Batagur (English), Beluku (Iban, Borneo), Tuntong Sungei (Malaysia), Biuku, Sulong, Tuntung Semangka (Indonesia), Kura-kura jidat merah (West Kalimantan, Indonesia), Tumtum (East Kalimantan, Indonesia)

Distribution: Brunei Darussalam; Indonesia; Malaysia; Thailand

Physical Characteristics: Length: up to 60cm

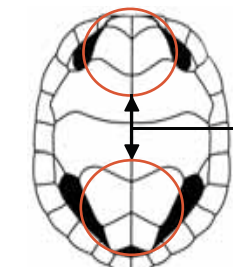
Distinguishing Features:

- Five claws on front feet
- Top shell (carapace) colour varies
- Head colour varies



Upturned snout
Serrated jaws

Batagur borneoensis female
Credit: Mark Auliya/TSEA



Front and back of plastron narrow

Bottom shell (plastron)
Image Credit: Environment Canada

Female (see picture on left)

Head: Orange-brown
Top shell: Brown, may have faint pattern

Male - Non-breeding



Head: Grey with orange-brown strip

Top shell: Black-brown, 3 broad black stripes, edge scutes (scales) may have black patterns



Credit: Mark Auliya/TSEA

Male - Breeding



Head: White, black edged red strip

Top shell: Creamy white, smooth. Black patterns as in non-breeding male (see picture in "Traded As" section)

Batagur borneoensis male - breeding
Credit: Mark Auliya/TSEA

International Conservation Status:

Batagur baska:
CITES Appendix I
Batagur borneoensis:
CITES Appendix II
IUCN: CR

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

Traded as:

Eggs and live animals for the pet trade



Batagur borneoensis male in breeding colours
Credit: Chris Shepherd/TSEA



Credit: TSEA

Geoclemys hamiltonii - Black Pond Turtle

Black Pond Turtle

Family: Geoemydidae

Other Names: Black Spotted Turtle, Hamilton's Terrapin, Spotted Pond Turtle (English)

Distribution: Bangladesh; India; Nepal; Pakistan

Physical Characteristics: Top shell (carapace) length: Up to 39cm

International Conservation Status:
CITES Appendix I

IUCN: VU

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Peter Praschag

Distinguishing Features:



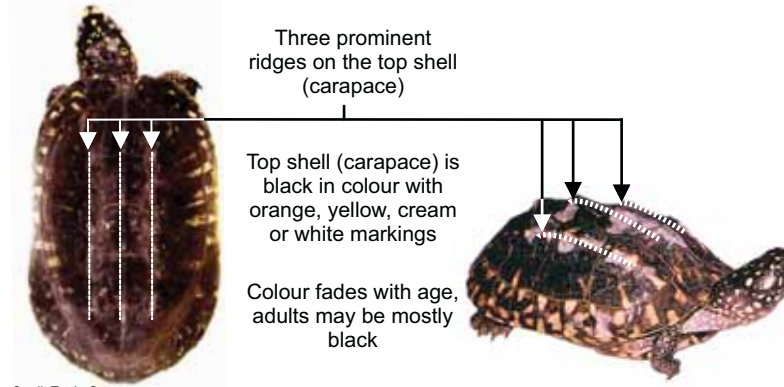
Photo credit: Turtle Conservancy

Head black with prominent yellow spots



Credit: Peter Paul van Dijk

Top shell serrated at the back (more obvious in juveniles)



Three prominent ridges on the top shell (carapace)

Top shell (carapace) is black in colour with orange, yellow, cream or white markings

Colour fades with age, adults may be mostly black

Credit: Turtle Conservancy

Credit: Peter Praschag



Bottom shell (plastron) yellow in colour with dark radiations.

Credit: Turtle Conservancy



Credit: Turtle Conservancy

Traded As:

Live animals for the pet trade

Similar To:

American Spotted Pond Turtle
(Clemmys guttata)
CITES: Not listed
IUCN: Vulnerable



Credit: Olivier Caillabet

- Yellow spots on top shell (carapace)
- No yellow spots on the head
- Top shell (carapace) has no ridges

Top shell (carapace) length: Between 8.9 - 13.6cm

Distribution: USA

Cuora spp. - Asian Box Turtle species

Asian Box Turtle species

Other Names:

Distribution: South and Southeast Asia

Physical Characteristics: Length: up to 30cm

International Conservation Status:^α

All *Cuora* spp. are listed in **CITES Appendix II**

IUCN: Varies from VU to EN

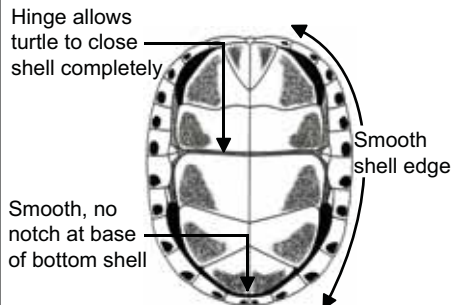
National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Chris Shepherd/TSEA

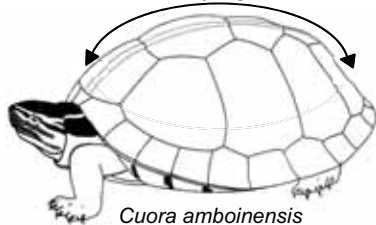
Distinguishing Features:

- Hinge on bottom shell (plastron)
- Edge of shell smooth (not serrated)
- Top shell (carapace) relatively high dome
- No notch at base of bottom shell (plastron)



Bottom shell (plastron)
Cuora amboinensis

Relatively high dome



Cuora amboinensis

Image Source: Environment Canada

Cuora spp. most commonly found in trade in Southeast Asia:

***Cuora amboinensis* - Southeast Asian Box Turtle**
IUCN: VU

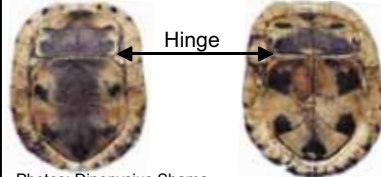


Credit: Mark Auliya/TSEA



Three yellow stripes on black head

Credit: Mark Auliya/TSEA



Hinge

Photos: Dinonyus Shama

Length: 22 - 25cm
Distribution: Bangladesh; Cambodia; India; Indonesia; Malaysia; Myanmar; Philippines; Thailand; Viet Nam

***Cuora galbinifrons* - Indochinese Box Turtle**
IUCN: CR

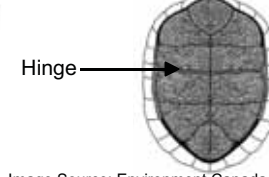


Credit: Mark Auliya/TSEA



Three black stripes on brownish head (not in juvenile)

Credit: Mark Auliya/TSEA



Hinge

Image Source: Environment Canada

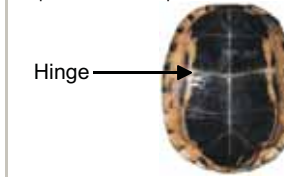
Length: Up to 19.8cm
Distribution: Cambodia (?); China; Lao PDR; Viet Nam

***Cuora trifasciata* - Chinese Three-striped Box Turtle**
IUCN: CR



Three black stripes on brownish head (not in juvenile)

All photos: Chris Shepherd/TSEA



Hinge

Length: Up to 20.3cm
Distribution: China; Lao PDR; Myanmar (?); Viet Nam

Traded as:

Live animals mainly for the meat trade (often in large quantities), some as pets



Cuora amboinensis
Credit: Chris Shepherd/TSEA



Cuora amboinensis
Credit: Mark Auliya/TSEA

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Leucocephalon yuwonoi - Sulawesi Forest Turtle

Sulawesi Forest Turtle

Family: Geoemydidae

Other Names: Kura-kura daun (Indonesia)

Distribution: Indonesia

Physical

Characteristics: Top shell (carapace) length: Up to 25 - 28cm

International Conservation Status:
CITES Appendix II

IUCN: CR

National Protection Status in Singapore:
Endangered Species (Import and Export) Act, 2006



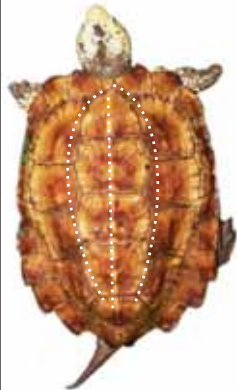
Credit: Ian Ives

Traded As:

Meat and as live animals for the pet trade

Distinguishing Features:

Top shell (carapace)

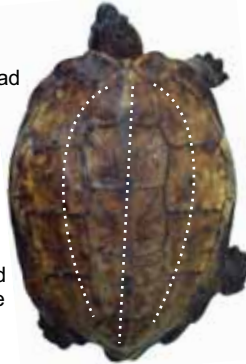


Credit: Mark Auliya/TRAFFIC

No stripes on head

Three well developed keels

Top shell serrated at the back (more in juveniles)



Credit: Ian Ives

Five scutes (scales) across the top



Credit: Sabine Schoppe



Mark Auliya/TRAFFIC



Credit: Ian Ives



Credit: Sabine Schoppe

Similar To:

Asian Leaf Turtle
(*Cyclemys dentata*)
CITES: Not listed
IUCN: NT



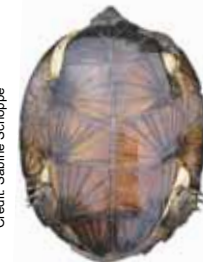
Mark Auliya/TRAFFIC

Head and neck dark, orange to light reddish brown stripes on side of head and under neck

Top shell (carapace):

- Brown to black in colour
- Single keel, (less obvious in older animals)
- Five scutes (scales) along the top

Credit: Sabine Schoppe



Credit: Sabine Schoppe

Bottom shell (plastron):

- Yellow or light brown with dark radiations to dark brown or black

Distribution: Bangladesh; Brunei Darussalam; Cambodia; China (?); India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Singapore; Thailand; Viet Nam

Malayan Flat-shelled Turtle
(*Notochelys platynota*)
CITES: Appendix II
IUCN: VU



Credit: Sabine Schoppe

Top shell (carapace):

- Greenish to yellowish brown or reddish brown
- Flattened, but with single keel
- Six scutes (scales) along the top



Credit: Sabine Schoppe

Bottom shell (plastron):

- Yellow to orange with large dark mark on each scute (scale), mostly black in some animals

Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar (?); Thailand; Viet Nam

Platysternon megacephalum - Big-headed Turtle

Big-headed Turtle

Family: Platysternidae

Other Names:

Distribution: Cambodia; China; Lao PDR; Myanmar; Thailand; Viet Nam

Physical

Characteristics: Top shell (carapace) length: Up to 20cm

International Conservation Status:
CITES Appendix II

IUCN: EN

National Protection Status in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Peter Paul van Dijk

Distinguishing Features:

Very distinctive freshwater turtle.

Head: Too large to withdraw into the shell

Top covered with a single large scute (scale)

Tail: Almost as long as the carapace (top shell)

Covered with large scales



Adult



Traded As:

Live animals for the pet trade and as meat

Similar To:

No other species

Juvenile



Juvenile plastron (bottom shell) orange with black markings at the centre



Orlitia borneensis - Malaysian Giant Turtle

Malaysian Giant Turtle

Other Names: Bajuku, Biukuk (Indonesia); Juku juku besar, Baning dayak (Malaysia)

Distribution: Indonesia; Malaysia

Physical Characteristics: Length: up to 80cm

International Conservation Status:^α
CITES Appendix II

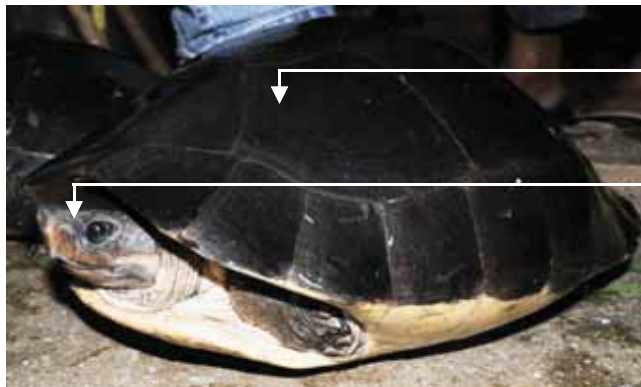
IUCN: EN

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Mark Auliya/TSEA

Distinguishing Features:



Top shell (carapace)
Grey, brown or black

Head brown or black

Thickened scales
around the eye

Sharp notch at the base
of the lower shell (plastron)

Credit: Mark Auliya/TSEA



First central
scute wide at
top and narrow
at base



Credit: Mark Auliya/TSEA



Credit: Mark Auliya/TSEA

Traded as:

Live animals for the meat trade (often in large quantities)



Credit: Chris Shepherd/TSEA



Credit: Chris Shepherd/TSEA

Siebenrockiella leytensis - Philippine Forest Turtle

Philippine Forest Turtle

Family: Geoemydidae

Other Names: Bakoko, Bakuku (Philippines); Philippine Pond Turtle, Leyte Pond Turtle, Necktie Turtle (English)

Distribution: Palawan and Dumaran Islands, Philippines

Physical Characteristics: Carapace (Top shell) length: Up to 30cm, body weight: up to 3.5kg or more

International Conservation Status:^a

CITES Appendix II

IUCN: CR

National Protection in Singapore:

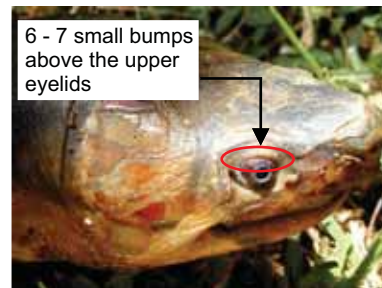
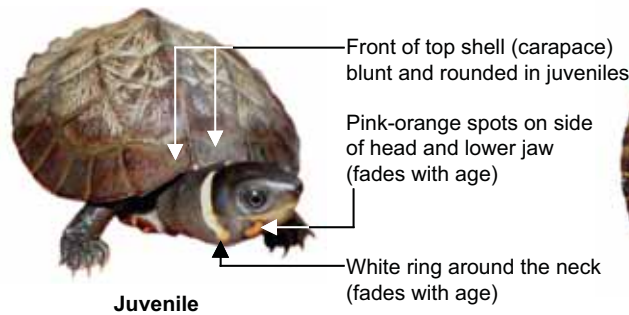
Endangered Species (Import and Export) Act, 2006



Traded As:

Live animals for the pet trade, food and traditional medicine

Distinguishing Features:



Adult



Juvenile

Upper jaw slightly hooked

Large head

Colour of head fades with age



Adult

Top shell (carapace)

Bottom shell (plastron)

Yellowish, light brown to dark brown and black in colour, never with lines

First two scales (scutes) project forwards in older animals

Carapace serrated at the bottom edge of the shell (smooth in older females)



Juvenile



Adult



Juvenile



Adult

Similar To:

Black Marsh Turtle
(*Siebenrockiella crassicollis*)

CITES Appendix II

IUCN: VU



Upturned mouth: giving "smiling" appearance

Head, neck black/grey with yellow or white spots (hard to see in adult males)

Bottom shell (plastron) may be black or light in colour.



Black marks visible at edge of scales (scutes) if the plastron is light colour

Distribution: Cambodia; Indonesia; Malaysia; Myanmar; Singapore; Thailand; Viet Nam

Physical

Characteristics: Top shell (carapace) length: Up to 20cm

Photo credit: Mark Auliya/TSEA

Trachemys scripta elegans - Red-eared Slider

Red-eared Slider

Other Names: Kura-kura Telinga merah, Kura-kura ninja (Indonesia), Kura terlinga-merah (Malaysia).

Distribution: U.S.A.
NOTE: Introduced species in Brunei Darussalam; Indonesia; Malaysia; Papua New Guinea; Philippines; Singapore and in other temperate, tropical and sub-tropical countries around the World.

Physical Characteristics: Length: up to 30cm

International Conservation Status:
Not CITES listed

IUCN: Not listed

National Protection in Singapore:
 Not protected



Credit: Mark Auliya

Distinguishing Features:



Long red patch

Dark green head with yellow stripes

Credit: Mark Auliya

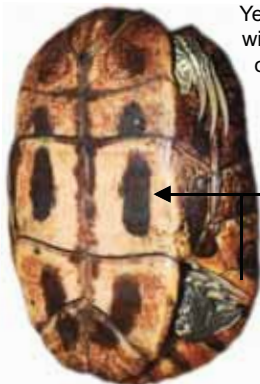
- The shell colour (both top and bottom) varies with age.
- The colouration of the head does not change with age.
- The red patch on the side of the head, behind the eye is always present.
- Adult males have long claws.

Bottom shell (plastron)

Markings vary, but are similar to this



Very young animal
 Credit: Sabine Schoppe



Adult
 Credit: Mark Auliya

Yellowish-orange with a dark mark on each scale (scute)



Top shell (carapace)
 Green- yellow in young animals, darkening with age to almost black

Scales (scutes) with radiating lines

Very young animal
 Credit: Sabine Schoppe

Adult
 Credit: Mark Auliya

Old adult
 Credit: Mark Auliya

Traded as:

Live animals for meat and the pet trade. Animals for the pet trade are often sold as juveniles.



Credit: Sabine Schoppe

NOTE:
 Millions of captive bred Red-eared Sliders are traded legally each year.

Smugglers often list this species on the documents and then put other turtle species inside the shipment.

Testudinidae spp. - Tortoise species

Tortoise species

Other Names:

Distribution: Africa (including Madagascar); Americas; Europe; Asia

Physical Characteristics: Length: 10 - 135cm, Weight: 140g - 300kg

International Conservation Status: ^α

All are listed in **CITES Appendix II***, except for 8 species which are listed in **Appendix I**

- Astrochelys (Geochelone) radiata* - Radiated Tortoise
- Astrochelys (Geochelone) yniphora* - Ploughshare Tortoise
- Chelonoidis (Geochelone) nigra* - Galapagos Giant Tortoise
- Gopherus flavomarginatus* - Yellow-bordered Tortoise
- Psammobates geometricus* - Geometric Tortoise
- Pyxis arachnoides* - Spider Tortoise
- Pyxis planicauda* - Flat-tailed Tortoise
- Testudo kleinmanni* - Kleinmann's Tortoise

IUCN: Varies up to CR

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Manouria impressa
Credit: Doug Hendrie

Distinguishing Features:

Solid, often domed top shell (carapace)

Annual rings on scutes often very clear and well defined

Wide stumpy or "elephantine" hind feet



Credit: Mark Auliya/TSEA

Most can withdraw neck and limbs entirely into their bony shell

Some species can grow up to enormous size, weighing up to 300kg



Credit: Chris Shepherd/TSEA

NOTE:

All Testudinidae spp. live on land.

Live specimens must be given fresh water to drink, but should never be placed in a pool as they may drown.

***NOTE:** *Geochelone sulcata* - African Spurred Tortoise listed in CITES Appendix II . Zero quota for specimens removed from the wild and traded for primarily commercial purposes

Similar to: Freshwater and marine turtles

Freshwater turtle



Webbed feet

Trachemys scripta elegans - Red-eared Slider
Credit: Mark Auliya/TSEA

Marine turtle



Flipper-like feet

Eretmochelys imbricata - Hawksbill Turtle
Credit: Cat HOLLOWAY / WWF-Canon

NOTE:

Freshwater and marine turtles live mostly in water.

Traded as:

Live animals for the pet trade, meat, shell for medicine or decorative items



Seizure of live Tortoises
Credit: Hartmut JUNGIUS / WWF-Canon



Tortoise shells used to make musical instruments
Credit: Hartmut JUNGIUS / WWF-Canon

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Astrochelys (Geochelone) radiata - Radiated Tortoise

Radiated Tortoise

Other Names:

Distribution: Madagascar; introduced to Mauritius; Réunion

Physical Characteristics: Carapace (top shell) Length: Up to 40cm

International Conservation Status:
CITES Appendix I

IUCN: CR

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Distinguishing Features:
Black rays of star pattern form fan-like design on about one quarter of the scute (scale)

Plastron with black triangles (Bottom shell)

Traded as: Live animals for the pet trade, often as young animals

Radiated Tortoise Shell Pattern

Radiated Tortoise Shell Pattern

Similar to: *Geochelone elegans* - Indian Star Tortoise
CITES Appendix II

Black rays of star pattern extend in all directions

Top of scutes (scales) sharply angled in adults

Carapace Length: Up to 38cm

Plastron

Geochelone platynota - Burmese Star Tortoise
CITES Appendix II

Fewer dark rays, creamy-white background

No line linking centre of star pattern

Credit: Mark Auliyah/TSEA

Credit: Jérôme Maran

Carapace Length: Up to 26cm

Plastron

Pixys arachnoides - Spider Tortoise
CITES Appendix I

Credit: WWF-Canon / Urs WOY

Carapace Length: Up to 15cm

Plastron*
Hinge present in some

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* Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA except where indicated.
Check current conservation status at www.cites.org, www.iucnredlist.org

Astrochelys yniphora* - Ploughshare Tortoise

Ploughshare Tortoise

Other Names: Angonoka (Madagascar)
 *Scientific name may also be listed as *Angonoka yniphora* or *Geochelone yniphora*

Distribution: Madagascar

Physical Characteristics: Carapace (Top shell) Length: Up to 48cm

International Conservation Status:
CITES Appendix I

IUCN: CR

National Protection in Singapore:
 Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / Meg GALLER

Distinguishing Features:

Young animals have a pattern of rectangles. The centre part of the scute (scale) is clear (no streaks or spots).

Colours may fade in older animals.



Highly domed carapace

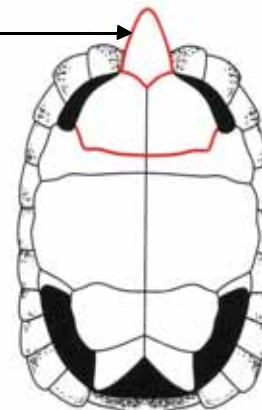


Credit: Kathrin Schmidt

Large elongated and upturned protruding front scute (scale) on the underside of the shell (plastron) - longer in adult male.



Credit: WWF-Canon / Martin HARVEY



* Image Source: Environment Canada

Traded as: Live animals for the pet trade, as young animals and adults



Adult Ploughshare Tortoise confiscated from trade
 Credit: Mark Auliya/TSEA

Similar to: As an adult, unmistakable, but hatchlings and juveniles of *Geochelone sulcata* (African Spurred Tortoise) look similar.

Young *Geochelone sulcata* have:

- A less domed shell
- A lighter colour
- Jagged edges to the shell



Credit: Mark Auliya/TSEA

Credit: Sandrine Pantel/TSEA

Chelonoidis (Geochelone) carbonaria - Red Footed Tortoise

Red Footed Tortoise

Family: Testudinidae

Other Names: South American Red-footed Tortoise, Cherry-headed Tortoise (English)

Distribution: Argentina; Bolivia; Brazil; Colombia; Guiana; Panama; Paraguay; Venezuela

Physical Characteristics: Top shell (carapace) length: Up to 51cm

International Conservation Status:^a
CITES Appendix II

IUCN: Not listed

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: David Lawson/WWF-UK

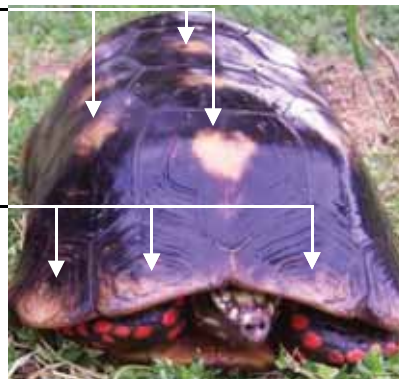
Distinguishing Features:



*Credit: Deborah Bardowicks/Twycross Zoo

Top shell (carapace) black with yellow to reddish orange markings on top of the scutes (scales)

Top shell (carapace) has yellow to reddish orange markings at the edge of the edge scutes (scales)



Credit: Matt Morris

Top of front limbs covered with large red scales

Pre-frontal head scale not divided

Head scales are yellow, red or orange

Traded As:

Live animals for the pet trade



Credit: Matt Morris

Similar To:

Yellow-footed Tortoise
(*Chelonoidis (Geochelone) denticulata*)

CITES Appendix II
IUCN: VU

Length: Up to 82cm long

Distribution: Bolivia; Colombia; Ecuador; French Guiana; Guyana; Peru; Suriname; Trinidad and Tobago; Venezuela



Credit: Matt Morris

Top shell (carapace) brown with yellow to orange markings on top of the scales (scutes)

Top shell (carapace) has yellow to orange markings at the edge scales (scutes)



Credit: Matt Morris

Top of front limbs covered with large yellow or orange scales

Pre-frontal head scale divided in two parts

Head scales are yellow to orange



Credit: Matt Morris

^a Twycross Zoo's Red-footed Tortoise, photography by Deborah Bardowicks

^a Check current conservation status at www.cites.org, www.iucnredlist.org

Geochelone elegans - Indian Star Tortoise

Indian Star Tortoise

Other Names:

Distribution: India; Pakistan; Sri Lanka

Physical Characteristics: Carapace (Top shell) Length: Up to 38cm

International Conservation Status:
CITES Appendix II

IUCN: LR

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Distinguishing Features:

Black rays of star pattern extend in all directions

Top of scutes (scales) sharply angled in adults



Plastron (Bottom shell)

Traded as: Live animals for the pet trade, often as young animals



Young Indian Star Tortoises on display at a pet shop



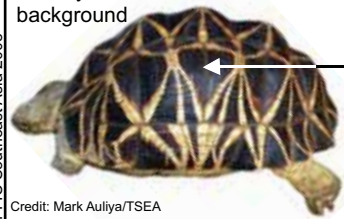
Indian Star Tortoise Shell Pattern

Similar to:

Geochelone platynota - Burmese Star Tortoise
CITES Appendix II

Fewer dark rays, creamy-white background

Top of scutes more rounded



Credit: Mark Auliy/TSEA

Carapace Length: Up to 26cm

No line linking centre of star pattern



Credit: Jérôme Maran
Plastron

Astrochelys (Geochelone) radiata - Radiated Tortoise
CITES Appendix I

Black rays of star pattern form fan-like design on about one quarter of the scute (scale)



Carapace Length: Up to 40cm



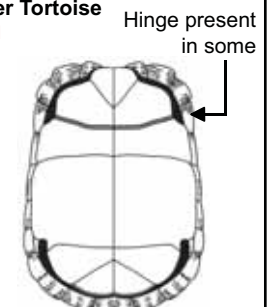
Plastron*

Pyxis arachnoides - Spider Tortoise
CITES Appendix I



Credit: WWF-Canon / Urs WOY

Carapace Length: Up to 15cm



Plastron*

* Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA (except where indicated).

Check current conservation status at www.cites.org, www.iucnredlist.org

Geochelone platynota - Burmese Star Tortoise

Burmese Star Tortoise

Distribution: Myanmar

Physical Characteristics: Carapace (top shell) Length: Up to 26cm

International Conservation Status:
CITES Appendix II

IUCN: CR

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: James Compton/TSEA

Distinguishing Features:

Fewer dark rays, creamy-white background

Top of scutes (scales) more rounded

No line linking centre of star pattern

Credit: Jérôme Maran

Plastron (Bottom shell)

Credit: Mark Auliya/TSEA

Traded as: Live animals for the pet trade, often as young animals

Adult Burmese Star Tortoise

Credit: James Compton/TSEA

Burmese Star Tortoise Carapace Pattern

Credit: James Compton/TSEA

Similar to: *Geochelone elegans* - Indian Star Tortoise

CITES Appendix II

Black rays of star pattern extend in all directions

Top of scutes (scales) sharply angled in adults

Plastron

Carapace Length: Up to 38cm

Astrochelys (Geochelone) radiata - Radiated Tortoise

CITES Appendix I

Black rays of star pattern form fan-like design on about one quarter of the scutes (scale)

Plastron

Carapace Length: Up to 40cm

Credit: Chris Shepherd/TSEA

Pyxis arachnoides - Spider Tortoise

CITES Appendix I

Hinge present in some

Plastron*

Carapace Length: Up to 15cm

Credit: WWF-Canon / Urs WOY

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* Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA
Check current conservation status at www.cites.org, www.iucnredlist.org

Geochelone (Stigmochelys) pardalis - Leopard Tortoise

Leopard Tortoise

Other Names:

Distribution: Angola; Botswana; Ethiopia; Kenya; Lesotho; Malawi; Mozambique; Namibia; Somalia; South Africa; Sudan; Swaziland; Tanzania; Uganda; Zaire; Zambia; Zimbabwe

Physical Characteristics: Carapace (Shell) length: Up to 70cm, Weight: 20kg

International Conservation Status:
CITES Appendix II

IUCN: Not listed

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / Michel TERRETTAZ

Distinguishing Features:

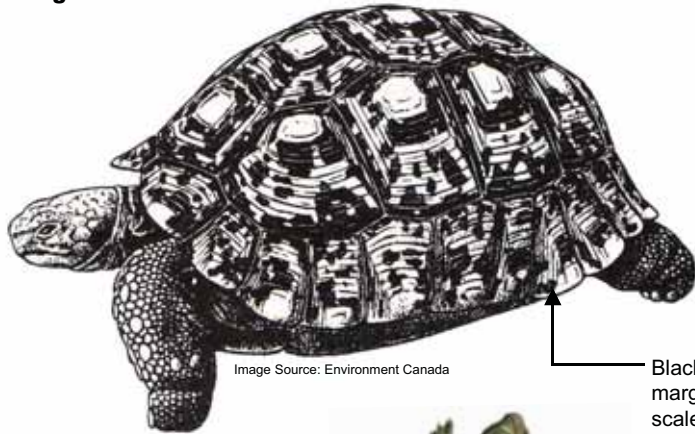
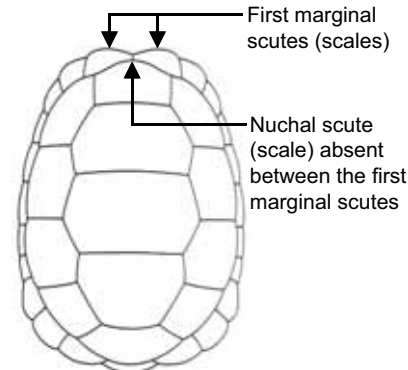


Image Source: Environment Canada

Black patches on the marginal scutes (edge scales), especially visible in young animals



Carapace (Top of shell)
Image Source: Environment Canada

- Shell pattern of black spots and markings on a light cream or yellow background.
- The markings on the shell vary according to the area of origin.
- Some have patterns all over the shell, others have few.
- The design fades with age.



Traded as: Live animals for the pet trade.



Seizure of Leopard Tortoises
Credit: WWF-Canon / Wil LUIJF

Geochelone (Centrochelys) sulcata - African Spurred Tortoise

African Spurred Tortoise

Family: Testudinidae

Other Names: Grooved Tortoise (English)

Distribution: Chad; Egypt; Eritrea; Ethiopia; Mali; Mauritania; Niger; Nigeria; Senegal; Somalia; Sudan

Physical Characteristics: Top shell (carapace) Length: Up to 83cm, body weight: up to about 100kg

International Conservation Status:

CITES Appendix II: Zero quota: International Trade in wild caught African Spurred Tortoises for commercial purposes is NOT permitted.

IUCN: VU

National Protection in Singapore: Endangered Species (Import and Export) Act, 2006



Credit: Turtle Conservancy

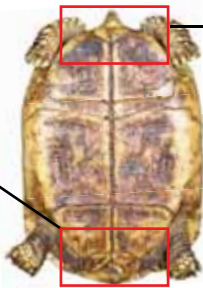
Traded As: Live animals for the pet trade

Distinguishing Features:

Bottom shell (plastron)



Two or three large conical spurs on each side of tail



Double scale (scute) at the front of the bottom shell (plastron)

Carapace (top shell) Yellow-brown in colour



Scale (scute) above tail not divided



No small scale (scute) at the front of the top shell (carapace)

As a young animal

- Slightly domed shell
- Light in colour
- Jagged edges to the shell



Credit: Mark Auliya/TSEA

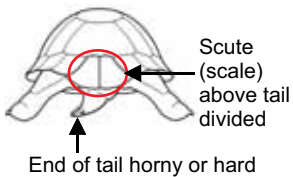
Similar To:

Hermann's Tortoise (*Testudo hermanni*)

CITES Appendix II
IUCN: NT



Credit: www.cheloniaphile.com



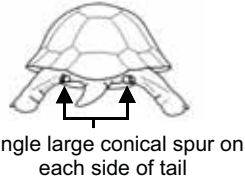
Length: Up to 20cm long
Distribution: Europe.
Image credit: UK Border Agency

Spur-thighed Tortoise (*Testudo graeca*)

CITES Appendix II
IUCN: VU



Credit: WWF-Canon/Michel Gunther



Length: Up to 40cm long
Distribution: Europe, Middle East.
Image credit: UK Border Agency

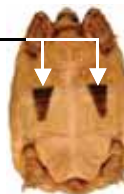
Kleinmann's Tortoise (*Testudo kleinmanni*)

CITES Appendix I
IUCN: CR



Credit: H. Zwartepoorte, Rotterdam Zoo

Bottom shell (plastron) pale yellow with two triangular marks



Length: Up to 14.4cm long
Distribution: Egypt (?), Libya.

Central Asian Tortoise (*Testudo horsfieldii*)

CITES Appendix II
IUCN: VU



Credit: Peter Paul van Dijk

Four claws on front foot



Length: Up to 22cm long
Distribution: East Europe; East, North and South Asia

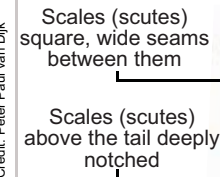
Asian Brown Tortoise (*Manouria emys*)

CITES Appendix II
IUCN: EN



Credit: Sabine Schoppe

Scales (scutes) square, wide seams between them



Length: Up to 60cm long
Distribution: Bangladesh; India; Indonesia; Malaysia; Myanmar; Thailand; Viet Nam

Males have spurs on the hind legs

Similar as young animal

Ploughshare Tortoise (*Astrochelys yniphora*)

CITES Appendix I
IUCN: CR



Credit: Chris R Shepherd/TSEA

Single scale (scute) at the front of the bottom shell (plastron)

Distribution: Madagascar

Indotestudo elongata - Yellow-headed Tortoise

Yellow-headed Tortoise

Family: Testudinidae

Other Names: Elongated Tortoise, Pineapple Tortoise (English), Banded Lontong, Kura-kura Mas (Malaysia)

Distribution: Bangladesh; Cambodia; India; Lao PDR; Malaysia; Myanmar; Nepal; Thailand; Viet Nam

Physical Characteristics: Top shell (carapace) length: Up to 36cm

International Conservation Status:
CITES Appendix II

IUCN: EN

National Protection Status in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: : Indraneil Das

Traded As:

Meat and as live animals for the pet trade

Distinguishing Features:

Highest point when viewed from the side is at third scute (scale) across the top



Yellow head

Males show pinkish colour around eyes and nostrils during breeding season.

Top shell (carapace)

Most have small, long and narrow nuchal scute (scale) at the centre of the front of top shell.

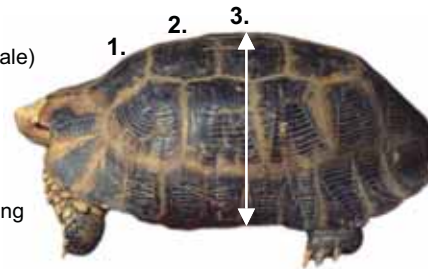
Markings vary. Orange or orange to greenish background. May have irregular black markings.

Young animals difficult to identify

Juvenile

Credit: Sabine Schoppe

Credit: Sabine Schoppe



Bottom shell (plastron)

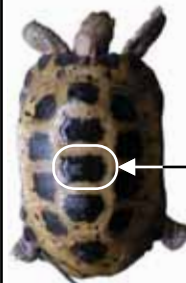


Similar To:

Sulawesi Tortoise
(Indotestudo forstenii)

CITES: Appendix II
IUCN: EN

Distribution: Sulawesi, Indonesia



Top shell (carapace)

Most animals have no nuchal scute (scale). Short and wedge shaped if present

Highest point when viewed from the side is at third scute (scale) across the top

Lemon-yellow colour, large black square-shaped mark at centre of scutes (scales)

Bottom shell (plastron)



Intense black marks. These markings are never cloudy or fragmented

All *Indotestudo forstenii* images are credited to: Ian Ives

Travancore Tortoise
(Indotestudo travancorica)

CITES: Appendix II
IUCN: VU

Distribution: India



Highest point of top shell (carapace) is at the second scute (scale) along the top (if shell is not deformed). May be on third scute in juveniles.

Most animals have no nuchal scale (scute)



Juvenile *Indotestudo travancorica*

Credit: Indraneil Das

Credit: S.U. Saravana Kumar

Malacochersus tornieri - Pancake Tortoise

Pancake Tortoise

Other Names:

Distribution: Kenya; Tanzania; Zimbabwe

Physical Characteristics: Carapace (Top shell) length: 18cm

International Conservation Status:

CITES Appendix II

IUCN: VU

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Fabian Schmidt

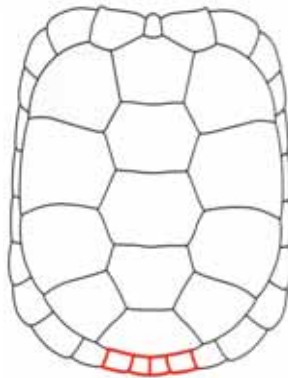
Distinguishing Features:

Shell is flat
(even large animals are
only about 6cm thick)

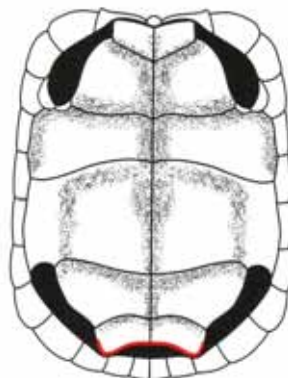
Star pattern on carapace
(always visible, but less
distinct in some animals)

The shell is squarish in
shape when viewed from
above.

The edges of the shell; both
top and bottom (carapace
and plastron) are fairly stiff;
but the **middle sections**
are soft to the touch.



Carapace (Top shell)



Plastron (Bottom shell)

Image Source: Environment Canada

Traded as: Live animals for the pet trade.



Pancake Tortoise on sale in a pet shop

Credit: Mark Auliya/TSEA

Manouria emys - Asian Brown Tortoise

Asian Brown Tortoise

Other Names: Baning perang, Kura-kura anam kaki (Malaysia), Kadazandusun, Suyan (Sabah, Malaysia), Baning coklat (Indonesia)

Distribution: Bangladesh; India; Indonesia (Sumatra and Borneo); Malaysia; Myanmar; Thailand, Viet Nam

Physical Characteristics: Length: up to 60cm. Weight: up to 30kg

International Conservation Status:^α
CITES Appendix II

IUCN: EN

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Chris Shepherd/TSEA

Distinguishing Features:

Largest of the Asian Tortoises

Top shell (carapace) and bottom shell (plastron) same colour - grey, brown or black

Head brown or black

Males have spur on the hind legs



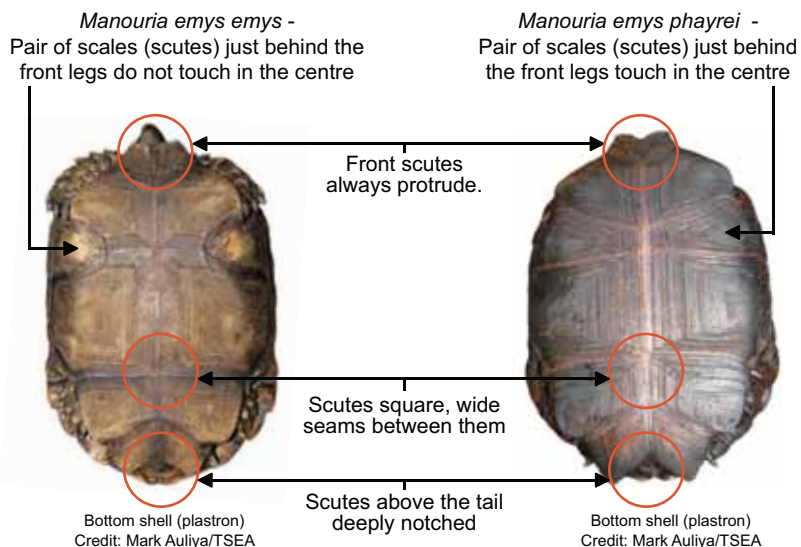
Credit: Chris Shepherd/TSEA

There are two subspecies of *Manouria emys*:

Manouria emys emys is found in Sumatra and Borneo (Indonesia); Malaysia; Southern Thailand

Manouria emys phayrei is found in Bangladesh; India; Myanmar; West-central Thailand

These look slightly different - but both are listed in CITES Appendix II



Traded as:

Live animals for meat and the pet trade



Credit: Chris Shepherd/TSEA



Credit: Mark Auliya/TSEA

Similar to:

Manouria impressa
Impressed Tortoise
CITES Appendix II

Length: up to 31cm

Top and side scales (scutes) curve inwards

Serrated and upturned edge to top shell (carapace)



Credit: Douglas B. Hendrie

Distribution: Lao PDR; Malaysia; Myanmar; Thailand; Viet Nam

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Manouria impressa - Impressed Tortoise

Impressed Tortoise

Other Names: Banning bukit (Malaysia); Banning Asia (Indonesia)

Distribution: Lao PDR; Malaysia; Myanmar; Thailand; Viet Nam

Physical Characteristics: Length: up to 33cm

International Conservation Status:^α
CITES Appendix II

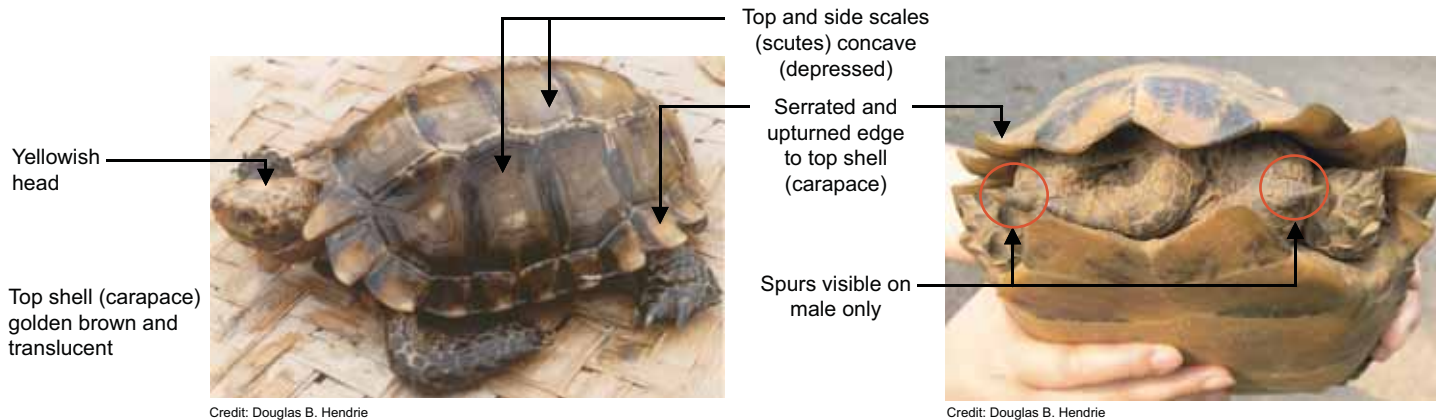
IUCN: VU

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Douglas B. Hendrie

Distinguishing Features:



Credit: Douglas B. Hendrie

Credit: Douglas B. Hendrie

Traded as: Live animals for meat and the pet trade



Credit: ENV/R

Similar to:

Manouria emys
Asian Brown Tortoise
CITES Appendix II

- Largest Asian Tortoise (up to 60cm long).
- Head brown or black
- Top and bottom shell - grey, brown or black
- Top and side scales do not curve inwards
- Edge of top shell not serrated and upturned



Credit: Chris Shepherd/TSEA

Distribution: Bangladesh; India; Indonesia (Sumatra and Borneo); Malaysia; Myanmar; Thailand; Viet Nam

Amyda cartilaginea - Asiatic Softshell Turtle

Asiatic Softshell Turtle

Other Names: Labi labi, Labi labi super, Kuaya emas (Indonesia)

Distribution: Brunei Darussalam; Cambodia; Indonesia; Lao PDR; Malaysia; Myanmar; Singapore; Thailand; Viet Nam

Physical Characteristics: Carapace (Top shell) Length: Up to 100cm

International Conservation Status:
CITES Appendix II

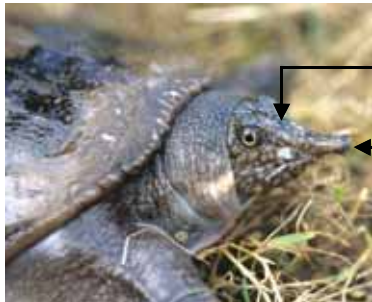
IUCN: VU

National Protection in Singapore:
Endangered Species (Import and Export), Act, 2006



Amyda cartilaginea
Credit: Mark Auliya

Distinguishing Features:



Credit: Mark Auliya

Yellow dots on head and neck
Nose is trunk-like and very straight



Credit: Mark Auliya

Carapace (top shell) rounded in shape
Front edge of carapace has a rough texture with small bumps (tubercles)



Traded as: Live for the meat trade



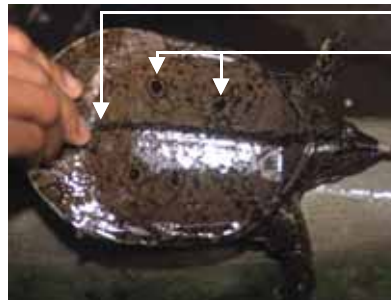
Amyda cartilaginea in trade
Credit: Chris Shepherd/TSEA

Similar to: *Dogania subplana* - Malaysian Softshell Turtle
IUCN: LR



Credit: Pauli Hien

Nose is trunk-like and turns down



Credit: Chris Shepherd/TSEA

Carapace flat and rather smooth
Dark stripe down centre of carapace
2 or 3 dark rims on each side (may be surrounded by a fine line)



Credit: Mark Auliya

Front edge of carapace smooth with no rough texture



Amyda cartilaginea before shipment (note shell damage)
Credit: Chris Shepherd/TSEA

Carapace (Top shell) Length: Up to 35cm
Distribution: Indonesia; Malaysia; Myanmar; Philippines; Singapore

Chitra spp. - Narrow-headed Softshell Turtles

Narrow-headed Softshell Turtles

Family: Trionychidae

Other Names: Labi-labi bintang (Indonesia), Manlai (Malaysia)

Distribution: Bangladesh; India; Indonesia; Malaysia; Myanmar; Nepal; Pakistan; Thailand

Physical Characteristics: Top shell (carapace) length: Up to 183cm

International Conservation Status:

All *Chitra* spp. are listed in CITES Appendix II

IUCN: CR - EN

National Protection Status in Singapore:

Endangered Species (Import and Export) Act, 2006



Hatchling *Chitra chitra* (Thailand)
Credit: Peter Paul van Dijk

Distinguishing Features:

Shell covered in leathery skin

Top shell (carapace) round and flat, smooth in adults

Bottom shell (plastron) cream coloured to pinkish white

Head narrow, long and very flat

Space between the eyes narrower than the width of the eye socket

Chitra vandijki
Credit: Jonathan Murray



Chitra chitra (Thailand)
Credit: Peter Paul van Dijk



Chitra chitra (Java, Indonesia)
Credit: Jonathan Murray



Credit: Peter Paul van Dijk

Three species of *Chitra*:

Southeast Asian Narrow-headed Softshell Turtle (*Chitra chitra*)

IUCN: CR

Overall colour: Greenish yellow to olive-green. Black in animals from Java, Indonesia
Distribution: Indonesia; Malaysia; Thailand

Burmese Narrow-headed Softshell Turtle (*Chitra vandijki*)

IUCN: Not listed

Overall colour: Chocolate brown
Distribution: Myanmar

Indian Narrow-headed Softshell Turtle (*Chitra indica*)

IUCN: EN

Colouration: Top shell (carapace) dark grey to olive with deep-olive green. Juveniles may have four eye patterns on top shell.
Distribution: Bangladesh; India; Nepal; Pakistan

Traded As:

Meat

Similar To:

Giant Softshell Turtles
***Pelochelys* spp.**



Credit: Arthur Georges

Colour and pattern varies, can be plain

Top shell length up to 150cm

Space between the eyes wider than the width of the eye socket

Head short and wide



Credit: Sabine Schoppe

Distribution: Australia; Bangladesh; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Papua New Guinea; Philippines; Thailand; Viet Nam

Pelochelys spp. - Giant Softshell Turtles

Giant Softshell Turtles

Family: Trionychidae

Other Names: Labi-labi raksasa (Indonesia), Antipa (Philippines)

Distribution: Australia (?); Bangladesh; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Papua New Guinea; Philippines; Thailand; Viet Nam

Physical Characteristics: Top shell (carapace) length: Up to 150cm

International Conservation Status:^a

All *Pelochelys* spp. are listed in CITES Appendix II

IUCN: EN - VU

National Protection Status in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Sabine Schoppe

Distinguishing Features:

- Shell covered in leathery skin
- Top shell (carapace) round and flat, smooth in adults
- Bottom shell (plastron) creamy white
- Head short and wide
- Space between the eyes wider than the width of the eye socket



Pelochelys cantorii
Credit: Sabine Schoppe



Pelochelys bibroni
Credit: Arthur Georges

Three species of *Pelochelys*:

Frog-faced Softshell Turtle (*Pelochelys cantorii*)

IUCN: EN

Colouration: Top shell (carapace) brown in colour with no distinct pattern
Distribution: Bangladesh; Cambodia; China; India; Indonesia (Sumatra, Kalimantan, Sulawesi); Lao PDR; Malaysia; Myanmar; Papua New Guinea; Philippines; Thailand; Viet Nam

Striped New Guinea Softshell Turtle (*Pelochelys bibroni*)

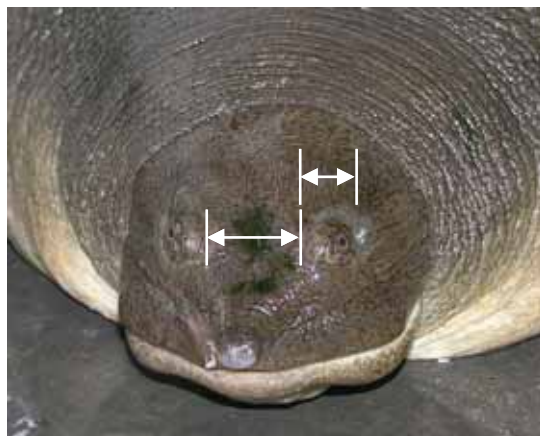
IUCN: VU

Colouration: Top shell (carapace) pattern similar to *Chitra chitra*, but with broad brown lines extending from back of neck onto the middle of the shell (see above)
Distribution: Indonesian Papua; Papua New Guinea; Australia (?)

Speckled Giant Softshell Turtle (*Pelochelys signifera*)

IUCN: Not listed

Colouration: Top shell (carapace) 55cm, olive-brown in colour with no pattern
Distribution: Indonesian Papua; Papua New Guinea



Pelochelys cantorii
Credit: Sabine Schoppe



Pelochelys cantorii
Credit: Sabine Schoppe

Traded As:

Meat

Similar To:

Narrow-headed Softshell Turtles
Chitra spp.



Credit: Jonathan Murray

Colour and pattern varies

Space between the eyes narrower than the width of the eye socket

Head long and narrow



Credit: Jonathan Murray

Distribution: Bangladesh; India; Indonesia; Malaysia; Myanmar; Nepal; Pakistan; Thailand

Pelodiscus sinensis - Chinese Softshell Turtle

Chinese Softshell Turtle

Other Names: Labi China (Malaysia), Labi labi Cina (Indonesia)

Distribution: China; Japan; Taiwan; Viet Nam
Captive bred in large numbers

Physical Characteristics: Length: 25 - 35cm

International Conservation Status:^α
Not CITES listed

IUCN: VU

National Protection in Singapore:
Not protected



Credit: Bui Dang Phong

Distinguishing Features:

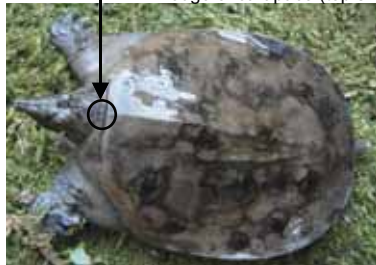
- Colour varies considerably (green, brownish grey)
- May have black markings on carapace (top shell)
- Long nose in comparison to most softshelled turtles
- Carapace often grooved

Hatchlings: Red/orange (may be yellow or white) but always with black spots on rear legs and plastron (bottom shell), red fades with age.
Note: pattern varies between individuals

One distinct bump on front edge of carapace (top shell)



Credit: Mark Auliya/TSEA



Credit: Bui Dang Phong



Credit: TSEA



Credit: TSEA



Credit: Mark Auliya/TSEA

Traded as:

Live animals for the pet trade and for the meat trade



Hatchlings for sale in a pet shop
Credit: Chris Shepherd/TSEA

Similar to:

Amyda cartilaginea
CITES Appendix II
IUCN: VU

- Yellow dots on head and neck
- Long straight nose
- Front edge of carapace (top shell) rough with distinct bumps



Credit: Mark Auliya/TSEA

Dogania subplana
Not CITES Listed
IUCN: LR

- Black line down the centre of the carapace (top shell)
- Front edge of carapace (top shell) smooth
- Long downturned nose



Credit: Mark Auliya/TSEA



At a meat market
Credit: Chris Shepherd/TSEA

Dyscophus antongilii - Tomato Frog

Tomato Frog

Other Names: Northern Tomato Frog

Distribution: Madagascar

Physical Characteristics: Length: 6 - 10.5cm

International Conservation Status:^α
CITES Appendix I

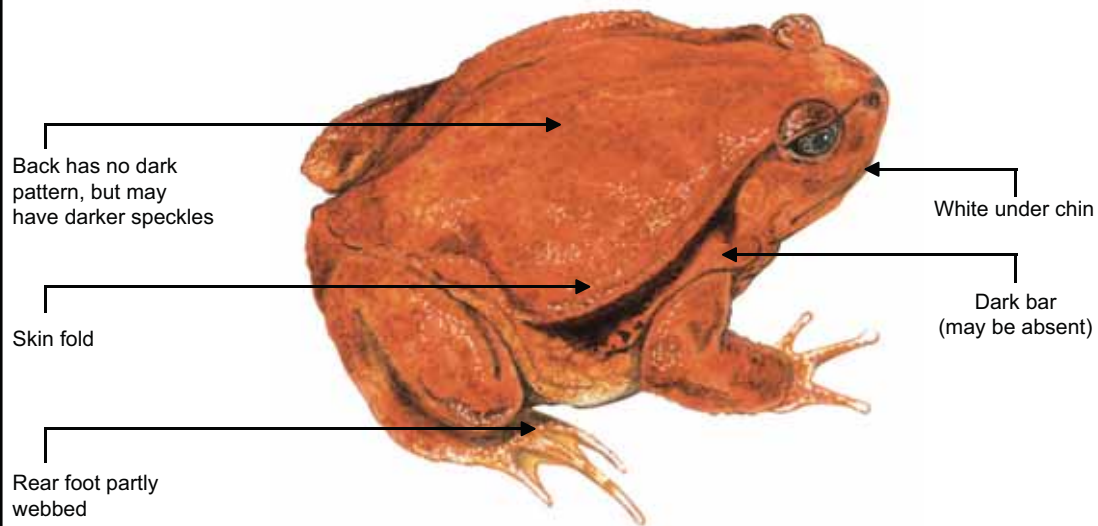
IUCN: NT

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: Mark Auliya/TSEA

Distinguishing Features:



Colour varies, but always more red than *Dyscophus guineti*

Image Source: Environment Canada

Similar to:

Dyscophus guineti
Southern Tomato Frog / False Tomato Frog
Not listed in CITES

Length: 6.4 - 10cm



Colour varies, but always lighter red than *Dyscophus antongilii*

Image Source: Environment Canada



Credit: R. Isotti, A. Cambone - Homo ambiens / WWF-Canon

Traded as:
Live animals for the pet trade

Scleropages formosus - Asian Arowana

Asian Arowana

Other Names: Ikan Kelisa (Malaysia); Ikan Kelesar (Indonesian); Jinglongyu (Chinese Hanyupinying), Trey tapawt (Khmer)

Distribution: Cambodia; Indonesia (Banka Island, Sumatra, Kalimantan); Lao PDR; Malaysia (including Sarawak); Myanmar; Thailand; Viet Nam

Physical Characteristics: Total Adult Length: Up to 100cm, but most often seen between 50 - 60cm

International Conservation

CITES Appendix I

Captive-bred animals can be traded ONLY IF:

1. The breeder is registered with the CITES Authorities
- AND
2. If the animal is tagged with a microchip,
- AND
3. If the animal is at least F2 (captive bred second generation)

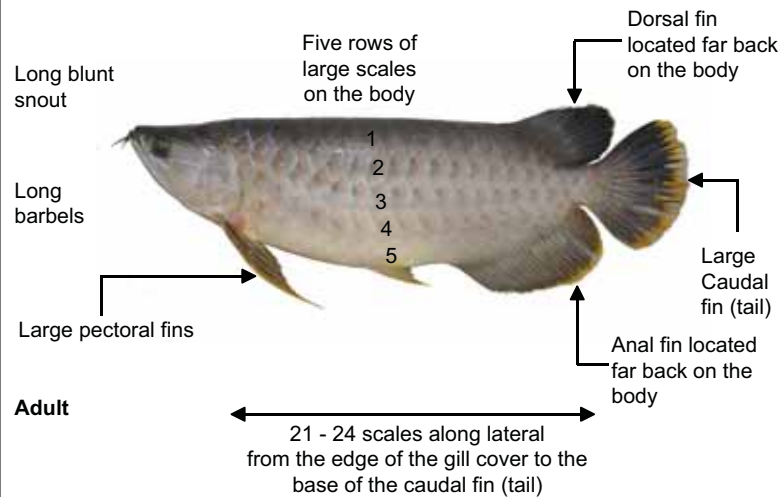
IUCN: EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



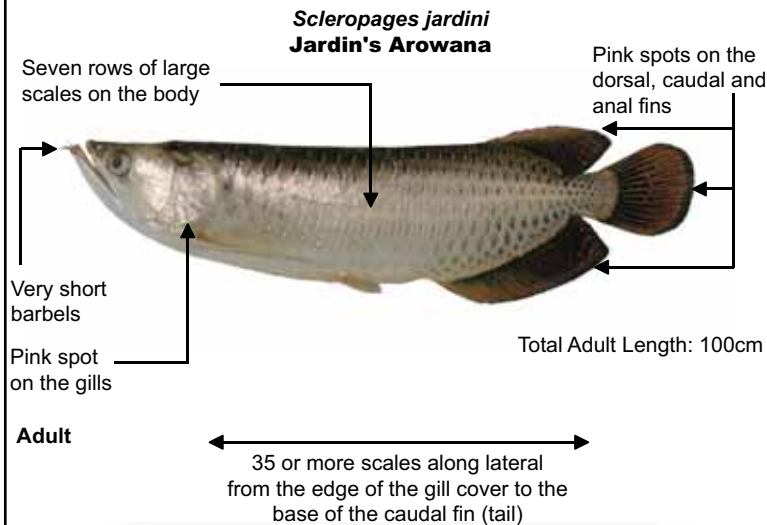
Distinguishing Features:



Adult

Juvenile

Similar to:



Adult

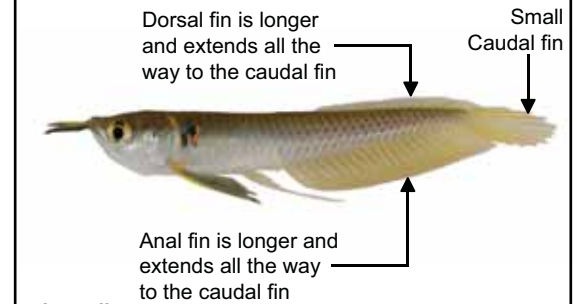
Juvenile

Traded as: Live animals for the Aquarium trade (often as juveniles).



Credit: Australia Customs

Similar to: *Osteoglossum bicirrhosum*
Silver Arowana



Juvenile

Total Adult Length: 120cm

Cheilinus undulatus - Humphead Wrasse

Humphead Wrasse

Other Names: Mameng, Licin, Langkawit (Malaysia), So-mei (Chinese)

Distribution: Indian Ocean: eastern and western;
Pacific: eastern central, northwest, western central.

Physical Characteristics: Length: 229cm, Maximum Weight: 191kg

International Conservation Status: ^a

CITES: Appendix II

IUCN: EN

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / WWF / Hong Kong Cindy Cheng

Distinguishing Features:



Credit: WWF-Canon / Frédéric MONNOT

Body colour and shape changes with age as shown in this juvenile.



Credit: WWF-Canon / John E. RANDALL

Most have bright yellow margin to the tail fin

All have distinctive lines running through the eye



Credit: Debbie Ng



Credit: Debbie Ng

Similar to:

Cheilinus chlorourus
Floral Maori Wrasse

- Does not have strong eye stripe or distinct bright yellow edge to tail fin.
- Has rows of white spots

Cheilinus trilobatus
Triple Tail Wrasse

- Does not have strong eye stripe or distinct bright yellow edge to tail fin.
- Has pink dots and rows

Traded as:

Living animals for the aquarium or restaurant trade. Animals are generally transported whole. Common market weight: 0.5 - 1.0kg and size: 30 - 40cm. Young animals may be kept in grow-out pens until they attain this size.



Fish Trap used for Humphead Wrasse
Credit: Debbie Ng



Humphead Wrasse awaiting transfer
Credit: Julia Ng / TSEA



Transfer of Humphead Wrasse
Credit: Debbie Ng



Humphead Wrasse on display in Restaurant ●
Credit: WWF-Canon / Michèle DUPRAZ

Hippocampus spp. - Seahorse spp.

Hippocampus spp. - Seahorse spp.

Other Names:

Distribution: Temperate and tropical coastal waters (from about 50 degrees north to 50 degrees south).

Physical Characteristics: Vary from 2cm up to 35cm in height.

International Conservation Status:^α

CITES Appendix II

IUCN: Varies up to EN

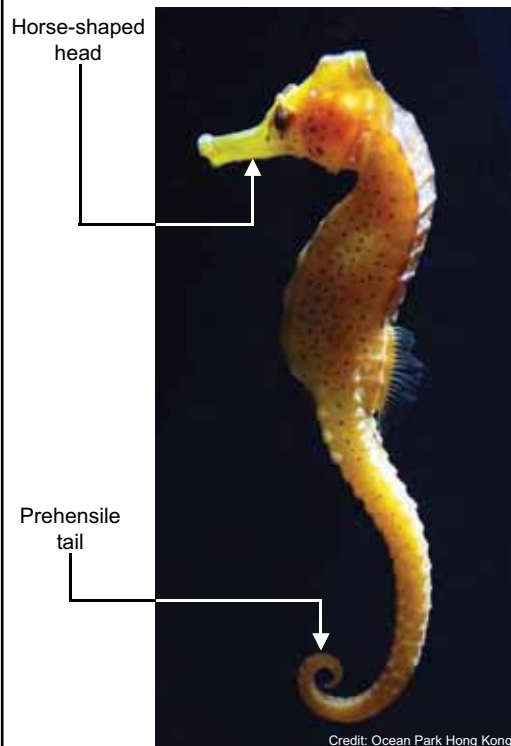


Credit: Ocean Park Hong Kong

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006

Distinguishing Features:



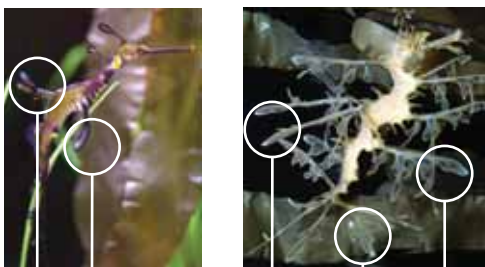
Credit: Ocean Park Hong Kong

Similar to:
Pipefish



- Elongated, long narrow body (like a stretched out and straightened seahorse)
- No prehensile tail (but can coil)

Seadragons



- Elaborate, permanent leaf-like appendages (quantity and appearance differ according to species)
- Deep, laterally flattened body

Photo Credits: Ocean Park Hong Kong

Traded as: Dried for traditional medicine or souvenirs or as live animals for the aquarium trade.



Dried Seahorses on display
Credit: Chris Shepherd/TSEA



Dried Seahorses
Credit: WWF-Canon / John E. Newby



Dried Seahorses
Credit: TRAFFIC SEA



Dried Seahorses on display
Credit: TRAFFIC SEA

Tridacnidae spp. - Giant Clam spp.

Giant Clam spp.

Other Names: Kima (Malaysia)

Distribution: Indo-Pacific

Physical Characteristics: Length: up to 130cm, Weight: up to 300kg

International Conservation Status:^α
All Tridacnidae spp. are listed in
CITES Appendix II

IUCN: Four listed, status varies from
LR/conservation dependent to VU

National Protection in Singapore:
 Endangered Species (Import and Export) Act, 2006



Credit: TSEA

Distinguishing Features:

Live

Thick flesh covering the body (mantle) extends over the edge of the shell when open



Credit: Aileen Tan Shau-Hwai



Credit: Mauri RAUTAKRI - WWF/Canon

Dead (shell only)

Inner shell not pearl-like and shiny



Credit: Claire Beasall



Credit: Claire Beasall



Credit: Claire Beasall

Traded as:

Meat, shells and live for the aquarium trade



Credit: Alain COMPOST / WWF-Canon



Giant Clam meat for sale
 Credit: Aileen Tan Shau-Hwai



Credit: TSEA



Giant Clam meat for sale
 Credit: Aileen Tan Shau-Hwai

^α Check current conservation status at www.cites.org, www.iucnredlist.org

Nepenthes spp. - Pitcher Plants

Pitcher Plants

Other Names:

Distribution: From northern Australia throughout Southeast Asia to southern China

International Conservation Status:^α

Two species: *Nepenthes rajah* and *Nepenthes khasiana* are listed in **CITES APPENDIX I**
All other *Nepenthes* are listed on **CITES APPENDIX II***

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Nepenthes macfarlanei (upper pitchers)
Credit: Carrol Lawrence

Distinguishing Features:

- Distinctive - vine like with thin stems and long narrow leaves (occasionally has branches)
- Pitcher emerges from the tip of the leaf - but not all leaves will develop pitchers



The pitcher grows from a tendril which is an extension of the leaf.



Nepenthes albomarginata
Credit: Carrol Lawrence

Nepenthes albomarginata
Credit: K.Kaliyanan



Nepenthes burbidgeae
Credit: Carrol Lawrence



Nepenthes macfarlanei (lower pitchers)
Credit: Carrol Lawrence



Nepenthes sanguinea
Credit: Carrol Lawrence

CITES I Listed species:

Nepenthes rajah

IUCN: EN

Distribution: Malaysia (Sabah - Mount Kinabalu and Mount Tamboyukon only)

One of several species where the tendril starts from the underside of the leaf, around 1/3 from the tip.

Pitcher may grow up to 35cm high and 18cm wide and hold over 3 litres of liquid.



Nepenthes rajah
Credit: Carrol Lawrence

Nepenthes khasiana

IUCN: Not listed

Distribution: India

NOTE: You should contact local experts for further definitive identification.

Traded as: Live plants

NOTE: Smugglers often cut off the last 1/3 of the leaf, removing all pitchers and tendrils to make identification more difficult.



Nepenthes rafflesiana in trade
Credit: Carrol Lawrence

***CITES APPENDIX II** listed species:

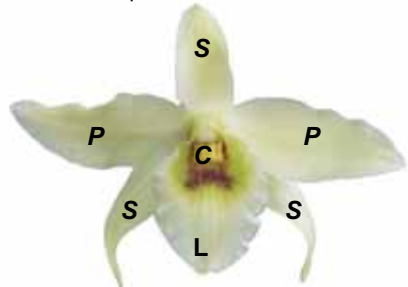
All parts and derivatives, except:
a) seeds, spores and pollen (including pollinia);
b) seedling or tissue cultures obtained in vitro, in solid or liquid media; transported in sterile containers.

Orchidaceae

Orchids

Other Names: Anggerik (Malaysia)

Over 25,000 species known - identification is difficult but flowers do share certain traits.



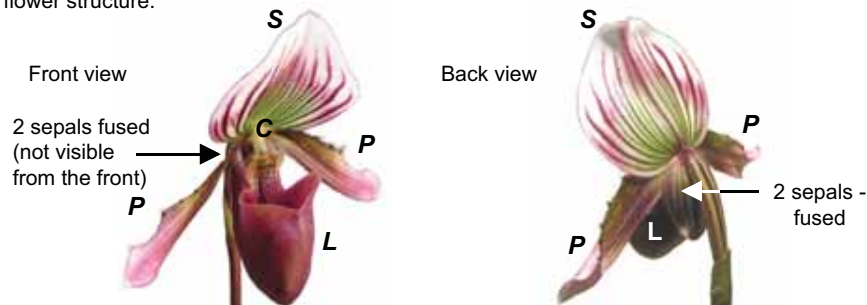
Flowers share certain traits:

- 3 sepals outside the petals (may look like a petal) (S)
- 3 petals (P), one (highly modified) forms a lip (L) and may be different in colour, shape & size to the other petals
- Left side of flower mirror image to the right
- Male and female flower parts fused into a column (C)

Credit: REACH/Amran

Slipper Orchids: Eg. *Paphiopedilum* spp. and *Phragmipedium* spp.

Typical flower structure:



Credit: REACH/Carroll

CITES Appendix I listed Orchids*

<i>Dendrobium cruentum</i>	Distribution: Thailand; Malaysia
<i>Renanthera imschootiana</i>	Distribution: India; Myanmar; Viet Nam
<i>Paphiopedilum</i> spp. (+/- 62 spp.)	Distribution: South and Southeast Asia; China; Papua New Guinea
<i>Phragmipedium</i> spp. (+/- 17 spp.)	Distribution: Central and South America
<i>Aerangis ellisii</i>	Distribution: Madagascar
<i>Laelia (Sophronitis) lobata</i>	Distribution: Brazil
<i>Laelia (Sophronitis) jongheana</i>	Distribution: Brazil
<i>Peristeria elata</i>	Distribution: Costa Rica; Panama; Venezuela; Colombia

International Conservation Status:

CITES Appendix I: 8 listed*

Seedlings or tissue cultures of these which are: obtained in vitro, in solid or liquid media, transported in sterile containers are not subject to CITES

CITES Appendix II: All other ORCHIDACEAE spp.

(See www.cites.org for exclusion details)

NOTE: All Wild Orchids require a CITES Permit

Traded as: Live specimens (not always in flower), cut flowers, souvenirs



Credit: REACH/Amran

Paphiopedilum lowii

CITES Appendix I listed Orchids* found in Southeast Asia



Credit: Greg Allikas

Dendrobium cruentum
Distribution: Thailand and Malaysia



Credit: Nik Ahmad Fahmi

Renanthera imschootiana
Distribution: India, Myanmar, Viet Nam



Eg. *Paphiopedilum barbatum*
Credit: REACH/Amran

Paphiopedilum spp. Distribution: South and Southeast Asia, China, Papua New Guinea

- Leaf: - Leathery with a prominent middle rib
- V-shaped in cross-section.
 - Usually short (under 20cm).
 - Colour varies from plain or glossy green to mottled purple).

NOTE: You should contact local experts for further definitive identification.

Orchids

All Wild Orchids require a CITES Permit...

	Wild	Artificially Propogated
Quantity:	Usually shipped in small numbers (less than 20 specimens)	Usually shipped in greater numbers (more than 20 specimens)
Size:	Specimen size varies	Specimens similar in size
Roots:	Often unhealthy, few in number, damaged or cut away. Growth direction differs from that expected from present container. May find algae, small ferns, tree bark, tree branch, rock, sand and small animals such as snails or insects.	Usually healthy, growth may be in the shape of the container. Artificial growth medium may be evident (charcoal, agar, coconut husk, sphagnum moss etc.)
General Appearance:	Unhealthy, leaves may be mottled or dull in colour, often damaged (insect, mould, algae, lichen)	Healthy with no damage to leaves (insect, mould, algae, lichen)

International Conservation Status:

CITES Appendix II: All Orchids

Except for 8 listed (see Orchidaceae CITES APPENDIX I sheet 1 of 2)

National Protection in Singapore:
Endangered Species (Import and Export) Act, 2006



Credit: WWF-Canon / Wil LUIIJF

NOTE: You should contact local experts for further definitive identification.

How to distinguish Wild from Artificially Propagated Orchids - What to look for...

Wild Orchid Roots:



Credit: REACH/Carrol

Might...

...show variation in growth direction (do not grow in the shape of a pot)

...be torn or damaged; new roots may grow from old damaged root material

...have part of the original substrate still attached

...be dead (fleshy outer layer withered into a brown powdery substance)

Wild Orchid Leaves:



Credit: Royal Botanic Gardens Kew



Credit: REACH/Carrol

Might...

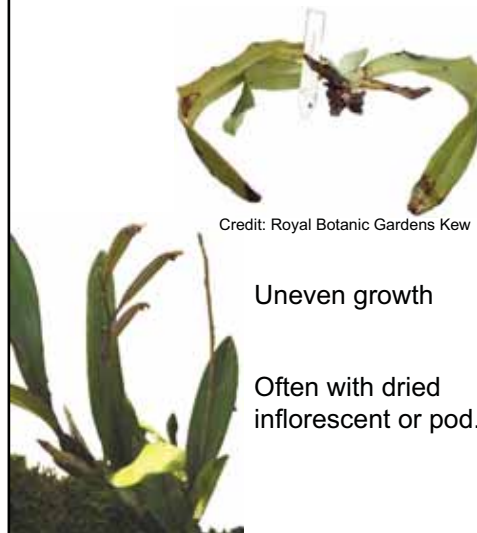
...be crushed or torn

...show signs of chewing by insects or small mammals

...have light coloured spots or holes caused by insects

...be damaged through desiccation (less swollen and cracked especially along the midrib)

Wild Orchid General Appearance:



Credit: Royal Botanic Gardens Kew

Uneven growth

Often with dried inflorescent or pod.

Credit: REACH/Carrol

Artificially propagated orchids:

...such as those grown in vitro culture are not subject to CITES

...plants artificially grown for export receive exactly the same treatment, are of the same size, age and health and so will look almost identical.



Credit: Royal Botanic Gardens Kew

Gonystylus spp. - Ramin spp.

Ramin

Other Names: Bengol, Gaharu, Melawis, Garu Buaja, Lanutan-bagio

Distribution: Brunei Darussalam; Indonesia, Malaysia; Papua New Guinea; Philippines; Solomon Islands

International Conservation Status:^α

CITES Appendix II

IUCN: 15 species listed VU

National Protection in Singapore:

Endangered Species (Import and Export) Act, 2006



Credit: Chen Hing Keong/TSEA

Steps towards Identification:

1. Take a sample of the wood to examine.

Cut this from a transverse section

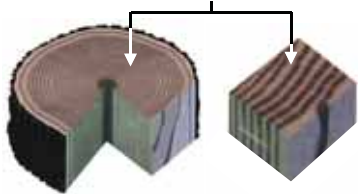


Image Source: Environment Canada

2. Examine the trimmed surface.



Use a very sharp knife to trim a small area from the surface of the transverse section

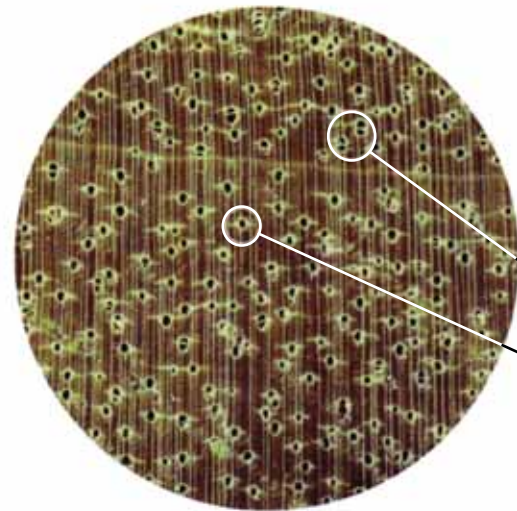


Use a 14x hand lens to examine the trimmed



You will need to hold the lens close to your eye to see clearly

What you should see:



Ramin

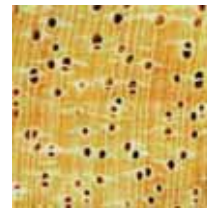
Heartwood whitish to pale yellow.

Moderately hard and heavy

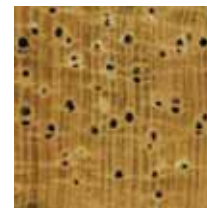
Vessels NOT obviously arranged in growth rings

Vessels usually solitary, but may be multiple

Winged structure surrounding vessels

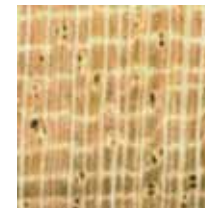


Gonystylus sp.

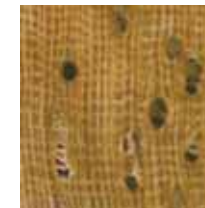


Gonystylus sp.

Similar to:



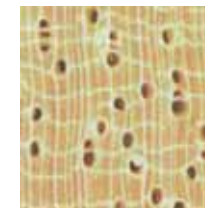
Alstonia scholaris



Hevea brasiliensis



Dyera costulata



Endospermium malaccense

NOTE: You should contact local experts for further definitive identification.

Traded as:

Sawn timber, treated timber, often used for door frames, picture frames, baby cots and rulers.



Ramin may be stained in many colours
Credit: Chris Shepherd/TSEA



The Association of Southeast Asian Nations Wildlife Enforcement Network (ASEAN-WEN) involves Police, Customs and environment agencies of all 10 ASEAN countries – Brunei, Cambodia, Indonesia, Lao P.D.R., Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam.

ASEAN-WEN co-ordinates the regional response to illegal trade in protected species, which threatens biodiversity, endangers public health, and undermines economic wellbeing.

- ASEAN-WEN is:
- * A regional INTERGOVERNMENTAL law-enforcement network designed to combat the illegal wildlife trade
 - * A proactive response to Southeast Asia's alarming levels of wildlife trafficking and loss
 - * A mechanism by which countries can share information and learn from each other's best practices



TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. It has offices covering most parts of the world and works in close co-operation with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

For further information contact:

Regional Director
TRAFFIC Southeast Asia
Unit 3 - 2, 1st Floor
Jalan SS23/11, Taman SEA,
47400 Petaling Jaya
Selangor
MALAYSIA

Tel: +603 7880 3940
Fax: +603 7882 0171
Website: www.traffic.org

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