IDENTIFICATION SHEETS FOR WILDLIFE SPECIES TRADED IN SOUTHEAST ASIA

(No national legislation included)

© TRAFFIC Southeast Asia 2008
(Restricted version)
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 in 2008 and 2009 and feature 87 sheets.

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

RESOURCES

MAMMALS

Bos gaurus & Bos javanicus, Gaur and Banteng
Capricornis spp., Serow spp.
Pantholops hodgsonii, Tibetan Antelope - Shatoosh
Saiga tatarica, Saiga Antelope
Deer and Antelers
Moshus spp., Multi-lined Antelers
Felidae (1), Cats
Felidae (2), Southeast Asian CITES I Cat species
Felidae (3), Parts & Derivatives commonly found in Trade
Southeast Asian Otters
Helarctos malayanus, Sun Bear
Ursus thibetanus, Asiatic Black Bear
Hemilepis derbianus & Chrotogale owstoni, Banded Palm Civet & Owston’s Civet
Prionodon pardicolor & Prionodon linsang, Spotted Linsang & Banded Linsang
Arcticis binturong, Binturong
Rhinocerotidae, Rhinoceros spp.
Manis spp., Pangolin spp.
Primates
Nycicebus spp., Loris spp.
Macaca fascicularis, Long-tailed Macaque
Elephas maximus & Loxodonta africana, Elephants

BIRDS

Lesser Whistling & Wandering Whistling Ducks
Adjutant Stork spp.
White-rumped Shama
Birds of Prey
Straw-headed Bulbul
Hill Mynah
Parrots
White Cockatoo spp
Palm Cockatoo
Indonesian Loriekeet spp.
Blue-crowned Hanging Parrot
Chattering Lory
Black-capped Lory
Owl spp.

MAMMALS

Bos gaurus & Bos javanicus, Gaur and Banteng
Capricornis spp., Serow spp.
Pantholops hodgsonii, Tibetan Antelope - Shatoosh
Saiga tatarica, Saiga Antelope
Deer and Antelers
Moshus spp., Multi-lined Antelers
Felidae (1), Cats
Felidae (2), Southeast Asian CITES I Cat species
Felidae (3), Parts & Derivatives commonly found in Trade
Southeast Asian Otters
Helarctos malayanus, Sun Bear
Ursus thibetanus, Asiatic Black Bear
Hemilepis derbianus & Chrotogale owstoni, Banded Palm Civet & Owston’s Civet
Prionodon pardicolor & Prionodon linsang, Spotted Linsang & Banded Linsang
Arcticis binturong, Binturong
Rhinocerotidae, Rhinoceros spp.
Manis spp., Pangolin spp.
Primates
Nycicebus spp., Loris spp.
Macaca fascicularis, Long-tailed Macaque
Elephas maximus & Loxodonta africana, Elephants

AMPHIBIANS

Dyscophus antongili, Tomato Frog

FISH

Platypus

INVERTEBRATES

Tridacnidae spp., Giant Clam species

PLANTS

Nepentheaceae, Pitcher Plants
Orchideaceae (1), CITES Appendix I species
Orchideaceae (2), Identification of Wild Orchids
Gonorystylus spp., Ramin species
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 Catagories 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 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.
Measurements and Glossary

**Measurements**

- **Head and Body Length**
- **Tail Length**
- **Shoulder Height**
- **Carapace (Top Shell) Length**
- **Total Length**

**Radiated Tortoise**

- Total Length is measured from the tip of the beak to the end of the tail.
- Lay the bird gently on its back to measure.

**Carapace (Top Shell) Length**

**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.

---

Image Credit: CITES MA, Switzerland

Image Credit: Chris Shepherd/TSEA

Image Credit: Vincent Nijman
**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

**Distinguishing Features**

- **Bos gaurus (B. frontalis) - Gaur**
  - Body deep brown, black or grey.
  - Lower legs white.
  - Horn Length: ≤ 95cm
  - Horn Circumference: ≤ 56cm

- **Bos javanicus - Banteng**
  - Body dark brown to black (male), light brown (female).
  - Lower legs and rump white.

**Similar to:**

- **Bubalus arnee - Water Buffalo**
  - Horns are black
  - Flattened
  - Horn Length: ≤ 149cm
  - Horn Circumference: ≤ 58cm

- **Bos taurus - Domestic Cow**
  - Body deep brown, black or grey.
  - Lower legs white.
  - Body dark brown to black (male), light brown (female).
  - Lower legs and rump white.

- **Budorcas taxicolor - Takin**
  - Horns may be ribbed at the base
  - Horn Length: ≤ 63.5cm
  - Horn Circumference: ≤ 33cm

**International Conservation Status**

- **Gaur:** CITES Appendix I
- **Banteng:** CITES Appendix I

**Traded as:** As horns and skulls, meat.

© TRAFFIC Southeast Asia 2008

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

**Distinguishing Features:**
- 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

**International Conservation Status:**

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

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

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

**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)

**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.**

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

**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.

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

© TRAFFIC Southeast Asia 2008
**Saiga tatarica - Saiga Antelope**

**Saiga Antelope**

**Other Names:**

**Distribution:**

Khazakstan; Mongolia; Russian Federation; Turkmenistan; Uzbekistan

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

**Distinguishing Features of Saiga Horns:**

- Different from any other horn.
- Only males have horns and these are:
  - Are solid at the base
  - Are semi-transparent
  - Are light waxy brown in colour
  - Are almost round in cross-section
  - Are slightly curved
  - Measure up to 30 cm (along the curve)

**Traded as:** Whole horns and horn shavings

**International Conservation Status:**

CITES Appendix II

IUCN: CR

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

© TRAFFIC Southeast Asia 2008
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:
CITES listing varies.

Traded as:
Whole antlers, antler velvet and other ingredients for traditional medicine

Axius porcinus -
Hog Deer
IUCN: EN, Axis porcinus annamaticus (from Viet Nam) listed as CR

Cervus nippon -
Sika Deer
IUCN: LC, Cervus nippon pseudaxis (from Viet Nam) listed as CR

Rucervus (Cervus) duvaucelli -
Barasingha Deer
IUCN: EN

Rucervus (Cervus) eldi -
Eld's Deer
CITES Appendix I
IUCN: EN

Rusa (Cervus) unicolor -
Sambar Deer
IUCN: VU

Cervus timorensis -
Javan Deer
IUCN: LR

© TRAFFIC Southeast Asia 2008

Image Source: Environment Canada unless stated

"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

**Distinguishing Features:**
- 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.

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

**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**

**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.

**Other Names:**

**Distribution:**

**Physical Characteristics:**

**Distinguishing Features:**

**Traded as:**

**The Musk Gland:**

**Examples of Musk Deer Product Packaging**

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

- **Chinese Character:** 鹿麝 or 麝香
- **Roman:** Moschus, Cervi, Moschus
- **Pinyin:** Lu She, She Xiang

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

January 2008
### Felidae (1) - Cats

#### International Conservation Status:
All Cats (except the domestic cat) are listed in CITES Appendix I or II

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

#### Distinguishing Features:
- **Head:** Rounded and short
- **Body:** Lithe, muscular, compact, deep chested
- **Mammal (nipples):** 2 - 4
- **Feet:** Front - 5 digits, Back - 4 digits. Pads naked.

#### 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

#### Traded as:
- Skins, bones, meat, teeth, claws, ingredients for traditional medicine and as living animals

---

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

January 2008

© TRAFFIC Southeast Asia 2008

---

[Images and credits for various cat species are included throughout the document.]
Southeast Asian Cats listed in
CITES Appendix I

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

Panthera tigris - Tiger

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

Panthera pardus - Leopard

Head & Body Length: 91 - 191cm,
Tail Length: 45 - 78cm
Weight: 45 - 65kg
Leopards with black coats
found in some locations -
(spots visible in sunlight).

Uncia uncia - Snow Leopard

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.

Neofelis nebulosa - Clouded Leopard

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

Catopuma temmincki - Asian Golden Cat

- 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.

Pardofelis marmorata - Marbled Cat

- Fur very thick.
- Similar to Neofelis
  nebulosa but smaller,
  more black spots on legs.

Prionailurus planiceps - Flat-headed Cat

- Small ears, top of head
  long and flattened.
- Coat appears deep red.
  Hair of upperparts brown
  with fine grey and pale buff
  speckles.

Prionailurus bengalensis - Leopard Cat

- 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).

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

© TRAFFIC Southeast Asia 2008

*Check current conservation status at www.cites.org, www.iucnredlist.org
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:**
All Cats (except the domestic cat) are listed on **CITES Appendix I or II**

---

**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:**
  - Tiger Bone: 虎骨
  - Leopard Bone: 豹骨

- **Pinyin:**
  - Tiger Bone: Hu Gu
  - Leopard Bone: Bao Gu

**Examples of Tiger Bone Product Packaging**

- Credit: TRAFFIC

**Teeth:**
- REAL TIGER TOOTH
  - Has 1 or more Grooves
  - Crown (section of tooth visible in the mouth)
  - Fangs (Canine teeth) tend to crack when dry

- FAKE TIGER TOOTH
  - Root (section of tooth hidden in the gum)

**Claws:**
- Almost semi-circular
- Pale yellow/amber in colour
- Pronounced structure on the bony end (planar process)
- May be translucent
- Pronounced structure on the bony end (planar process)

**Penis:**
- A Tiger Penis is definitely a fake if it ...
  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

**Examples of Tiger Bone Product Packaging**

- Credit: TRAFFIC

---

**Check current conservation status at:**

January 2008
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:

Anonyx 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

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

Lutra lutra
Eurasian Otter
CITES Appendix III
IUCN: NT

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

- Entirely dark brown
- 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

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

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

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.

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

International Conservation Status:

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

Traded as:
Skins, live for the pet trade

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

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

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

May 2009

*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

**Distinguishing Features:**

**Similar to:**

**Asiatic Black Bear - Ursus thibetanus**  
CITES Appendix I

**Traded as:**

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

**Credit:** Chris Shepherd/TSEA

**Sun Bear:**

**Head and Body Length:** 120 - 150cm  
**Tail Length:** 6 - 10cm

**Chest Marking*  
Hind Paw*  
Hind Claw*

**Front Paw*  
Front Claw**

2.4 - 3.2cm

1.8 - 3.6cm

3 - 5.3cm

3 - 4.5cm

**Common inscriptions used to describe bear bile**

* Chinese Character: 熊胆  
* Pinyin: Xiong Dan

**Bear Paws and other parts being rendered for oil**

**Credit:** Mei Hsiu Hwang

**Sun Bear Claws**

**Credit:** Mei Hsiu Hwang

**Sun Bear Gall Bladder**

**Credit:** Mei Hsiu Hwang

**Sun Bear Paw**

**Credit:** K kia

**Sun Bear Paws**

**Credit:** Chris Shepherd/TSEA

**Stuffed Sun Bear**

**Credit:** Chris Shepherd/TSEA

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

January 2008
**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

**Distinguishing Features:**

- Head and Body Length: 100 - 140cm, Tail Length: 3 - 7cm
- Chest Marking
- Front Paw
- Front Claw
- Hind Paw
- Hind Claw

**Similar to:** *Helarctos malayanus - Sun Bear*  
*CITES APPENDIX I*

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

**Common inscriptions used to describe bear bile**

- Chinese Character: 熊胆
- Pinyin: Xiong Dan

**International Conservation Status**

*CITES Appendix I*  
*IUCN: VU (CR for subspecies found in Iran and Pakistan)*

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

**Distinguishing Features:**
- 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.

---

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

**Distinguishing Features:**
- 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

---

**Traded as:**
Live and for fur trade and stuffed as souvenirs

---

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

© TRAFFIC South East Asia 2009

May 2009
# 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

### 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

## 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

### Distinguishing Features:

*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

---

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

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

**International Conservation Status:**
- Listed in CITES Appendix III by India
- IUCN: VU

**Traded as:**
As skins and live as young animals for the pet trade

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

© TRAFFIC Southeast Asia 2009

May 2009
Rhinocerotidae spp. - Rhinoceros spp.

**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**)

**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

**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 inscription used to describe rhinoceros horn on the packaging of Traditional Medicine products

**Chinese Character: 犀牛 垫 铁**

**Credit:** WWF-Canon / Martin HARVEY

**Ceratotherium simum simum horns.**

Note the look of the worn areas of the horn

Credit: WWF-Canon / Martin HARVEY

**Ceratotherium simum foot.**

Credit: Environment Canada

**Confiscated Rhinoceros Horn**

Credit: WWF-Canon / Mark ATKINSON

**Dicerorhinus sumatrensis**

Credit: Claire Beastall

**Rhinoceros Horn is used in the manufacture of dagger handles in the Yemen**

Credit: WWF-Canon / Esmond Bradley MARTIN

**NOTE:**

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

**Credit:** WWF-Canon / Martin HARVEY

**Check current conservation status at:**


May 2008
Manis spp. - Pangolin spp.

Pangolin

Other Names: Thing kway jut (Myanmar) Tế Tế (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

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

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

*Distribution: Palawan and Culion Islands, Philippines

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

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

Common inscriptions used to describe pangolin

Chinese Character: 穿山甲
Pinyin: Chuan Shan Jia

© TRAFFIC Southeast Asia 2008

January 2008
Primates - Apes and Monkeys

Distinguishing Features: All primates have:
- Forward facing eyes
- Short snout, flat face
- Nails instead of claws
- Four limbs

CITES I listed Southeast Asian Primates:

*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 (Sahab, Sarawak).

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

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

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

Nasalis larvatus (Proboscis Monkey)
Credit: Clare Beastall

Orangutan at Theme Park
Credit: Chris Shepherd/TSEA

Siamang at Market
Credit: Chris Shepherd/TSEA

Monkey Skull on sale
Credit: Clare Beastall

International Conservation Status:
All are at least CITES Appendix II.
See below for Southeast Asian Primates listed in CITES Appendix I

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

© TRAFFIC Southeast Asia 2008
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:
- Large eyes
- Dark rings around the eyes
- Wet nose
- Small ears
- Five toes on each foot
- Short or no visible tail

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

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

International Conservation Status:
CITES Appendix I
IUCN: Varies up to EN

"Check current conservation status at www.cites.org, www.iucnredlist.org"
**Macaca fascicularis** - Long-tailed Macaque

**Long-tailed Macaque**

**Other Names:** Kera (Malaysia), Mieo 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

**International Conservation**

CITES Appendix II

IUCN: LC

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

**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

**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

**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

**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

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

© TRAFFIC Southeast Asia 2008

March 2008
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

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

**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

**Other Names:**

**As Tusk or Carved:** Natural Substitutes: Mammoth Tusk (extinct 10,000 years ago), Narwal 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.

**Natural Substitutes:**
- Artificial Substitutes:
  - Resin, Casein

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

**Schreger Line**
Average Schreger line angle: over 100 degrees
Average Schreger line angle: under 100 degrees

**Elephant Teeth**
Credit: Chris Shepherd/TSEA

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

**Elephant Skin**
Credit: Chris Shepherd/TSEA

**Whole Elephant Tusk**
Credit: Chris Shepherd/TSEA

**Carved Elephant Tusk**
Credit: Chris Shepherd/TSEA

**Chopsticks made from Elephant Ivory**
Credit: Chris Shepherd/TSEA

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

© TRAFFIC Southeast Asia 2008

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

*Strict conditions apply, check CITES Appendices www.cites.org*

May 2008
**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

**Distinguishing Features:**
- Brown head with dark cap
- Brownish red underparts
- Yellow eye-ring
- Plain brown neck
- Upper tail reddish

**IUCN:** Dendrocygna javanica: LC

### Wandering Whistling Duck

**Other Names:**

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

**Physical Characteristics:** Length: 40 - 45cm

**Distinguishing Features:**
- Blackish-brown cap extents to above the eye
- Blackish line down the back of the neck
- Speckled lower neck
- Rich reddish-brown
- Large black and white markings
- Upper tail buff in colour

**IUCN:** Dendrocygna arcuata: LC

**Traded as:**
- Live animals

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

© TRAFFIC Southeast Asia 2009
**Leptoptilos spp. - Adjutant Storks**

### Greater Adjutant Stork

**Other Names:** Gio dấy lớn (Viet Nam)

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

**Physical Characteristics:** Length: 145 - 150cm

**Distinguishing Features:**
- Very large deep based beak
- Drooping pouch on lower neck
- Very large
- White feathers around edge of neck
- Grey feathers

**Credit:** Claire Beastall

### Lesser Adjutant Stork

**Other Names:** Botak Kecil (Malaysia), Gio dấy 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

**Distinguishing Features:**
- Broad dull coloured beak
- Glossy black back
- No grey feathers
- Large
- No white feathers around edge of neck
- White underparts

**Credit:** Claire Beastall

**International Conservation Status:**
- Not listed in CITES

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

**Traded as:**
- Live animals

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

May 2009

© TRAFFIC South East Asia 2009
Hornbills

Other Names: Africa and Asia

Distribution: Africa and Asia

Physical Characteristics: Length: 320cm

Distinguishing Features:

**Rhynoplax vigil** (Helmeted Hornbill) 
- Red casque with yellow at front edge
- Adult female - pale greenish skin on head and neck and a shorter tail
- Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar; Thailand

**Buceros bicornis** (Great Hornbill) 
- Hard growth (casque) on top of the bill
- Curved bill
- Distribution: Bhutan; Cambodia; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Thailand; Viet Nam

**Rhyticeros (Aceros) subruficollis** (Plain-pouched Hornbill) 
- Black body
- Tail all white
- Adult female - black head and neck, pouch blue
- Red casque
- Juvenile - reddish head and neck, pouch yellow
- Has no marking on the pouch.
- No growth (casque) on top of the bill
- Distribution: Malaysia; Myanmar; Thailand

**Aceros nipalensis** (Rufous-necked Hornbill) 
- White edge to tail and wings
- Heavy yellow bill
- Naked red throat
- Adult female mainly black, juvenile red head and neck
- Distribution: Bhutan; China; India; Lao PDR; Myanmar; Thailand; Viet Nam

**Anthracoceros albirostris** (Oriental Pied Hornbill) 
- No marking on the pouch.
- Adult female - black head and neck, pouch blue
- Juvenile - reddish head and neck, pouch yellow
- Adult female mainly black, juvenile red head and neck
- Distribution: Brunei Darussalam; Indonesia; Malaysia; Myanmar; Thailand

**Ramphastos toco** (Toco toucan) 
- Adult female - black head and neck, pouch blue
- Juvenile - reddish head and neck, pouch yellow
- Adult female mainly black, juvenile red head and neck
- Distribution: Bhutan; Cambodia; India; Indonesia; Lao PDR; Myanmar; Nepal; Thailand; Viet Nam

**Rhinoplax vigil** (Helmeted Hornbill)

**Buceros bicornis** (Great Hornbill)

**Rhyticeros undulatus** (Wreathed Hornbill) 
- (Marking on pouch often partly concealed)

**Anthracoceros albirostris** (Oriental Pied Hornbill)

**Aceros nipalensis** (Rufous-necked Hornbill)

**Rhyticeros (Aceros) subruficollis** (Plain-pouched Hornbill)

**Ramphastos toco** (Toco toucan)

**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**

Traded as:

Casques and live birds for the pet trade


July 2008
Copsychus malbaricus - White-rumped Shama

White-rumped Shama

Other Names: Murai Batu, Murai Hutan (Malaysia)

International Conservation Status:
Not CITES listed

IUCN: LC

Other Names: 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

Similar to: Copsychus luzoniensis
White-browed Shama
IUCN: LC; Not CITES listed

White brow
No white rump
Length: up to 18cm
Distribution: Philippines

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

Murai Batu, Murai Hutan (Malaysia)

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

Length: up to 25cm

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

Trichixis pyrropyga
Rufous-tailed Shama
IUCN: NT; Not CITES listed

White cap seen in birds from Sabah, Malaysia

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

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

Credit: John Steed

Rarely found in trade

Credit: Lee Kip Yang

Credit: Suppalak Klabdee

Credit: Wouter Thijs

Credit: Lim Kim Chye

Credit: Wouter Thijs

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

May 2009

© TRAFFIC South East Asia 2009
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

NOTE: Identifying chicks to species is very difficult.

International Conservation Status:
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

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


April 2008
**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

**Distinguishing Features:**
- Straw-yellow coloured head
- Black eye stripe
- Black moustache
- White throat

**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

**International Conservation Status:**

- CITES Appendix II
- IUCN: VU


© TRAFFIC Southeast Asia 2008
**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

**Distinguishing Features:**
- Glossy black iridescent plumage
- Band of white on each wing
- Yellow legs and feet
- Orange bill fading to yellow at the tip
- Bright yellow wattles

**Traded as:** Live animals for the Pet trade.

**International Conservation Status:**

**CITES:** Appendix II

**IUCN:** LC

**Similar to:**
- *Mino dumonti*
  - Yellow-faced Mynah
  - Yellow face patch around the eyes
  - Has no wattles
  - Chest brown
  - White tip to tail

**Traded as:**
- *Acridotheres tristis*
  - Common Mynah
  - Yellow face patch around the eyes
  - Has no wattles

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

January 2008
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

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

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.

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

International Conservation Status:

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

Traded as:

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

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.


© TRAFFIC Southeast Asia 2008
**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

**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

- **Cacatua haematuropygia**
  - Philippine Cockatoo
  - Yellow under wings and tail
  - Red under tail.
  - Distribution: Philippines
  - Height: 31cm

- **Cacatua sulphurea**
  - Yellow-crested Cockatoo
  - Yellow Crest
  - Yellow wash on face
  - Dull yellow wash under wings and base of tail
  - Distribution: Indonesia
  - Height: 33cm

- **Cacatua moluccensis**
  - Salmon-crested Cockatoo
  - Large backward curving white and pink crest
  - Other feathers pinky-white
  - Distribution: Indonesia
  - Height: 50cm

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

**International Conservation Status:**
- **CITES Appendix I** - 4 species
- **CITES Appendix II** - all others

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

Distinguishing Features:
- Long wispy crest
- Grey-black plumage
- Massive beak
- Red and black tongue
- Bare red-pink facial skin

Similar to:
- Other Black Cockatoos
  - CITES APPENDIX
  - 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
  - Only found in Madagascar; Comoros Islands and Seychelles
  - DO NOT have bare red-pink-facial skin
  - DO NOT have crest or black beak

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

International Conservation Status:
- CITES Appendix I
- IUCN: LC

Credit: Mark Auliya/TSEA

© TRAFFIC Southeast Asia 2008


January 2008
**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:**

- **Eos histrio** CITES Appendix I
  - IUCN: EN
  - Distribution: Sangir and islands in the Talaud and Nanusa groups, Indonesia.
  - Traded as: Live animals for the pet trade

- **Eos bornea** CITES Appendix II
  - IUCN: LC
  - Distribution: Moluccas including Buru, Seram and associated islands and the Kai Islands, Indonesia.

- **Eos semilarvata** CITES Appendix II
  - IUCN: LC
  - Distribution: Seram, Indonesia.

- **Eos squamata** CITES Appendix II
  - IUCN: LC
  - Distribution: Islands in the North Moluccas and West Papuan group, Indonesia.

- **Eos cyanogenia** CITES Appendix II
  - IUCN: VU
  - Distribution: Tanimbar group, Indonesia.

- **Eos reticulata** CITES Appendix II
  - IUCN: NT
  - Distribution: Islands in Geelvink Bay, West Papua, Indonesia.

**Traded as:** Live animals for the pet trade

---

**Distinguishing Features:**

- **Red and Blue Lory**
  - Eos histrio
  - CITES Appendix I
  - IUCN: EN
  - Head: 1. Purple-blue band on the back of the head (may vary in size)
  - Body: 2. Broad blue band across the chest
  - Tail: 3. Reddish-purple when viewed from above

- **Red Lory**
  - Eos bornea
  - CITES Appendix II
  - IUCN: LC
  - Head: 1. Blue around the eye, no other purple on head
  - Body: 2. No blue on the body, blue under base of tail
  - Wing: 3. Small blue patch on each wing

- **Blue-eared Lory**
  - Eos semilarvata
  - CITES Appendix II
  - IUCN: LC
  - Head: 1. Violet Blue on upper cheeks, ear area and band down side of neck
  - Body: 2. Blue on abdomen and under tail

- **Violet-necked Lory**
  - Eos squamata
  - CITES Appendix II
  - IUCN: LC
  - Head: 1. Violet blue collar round neck - varies may be very faint in some birds
  - Body: 2. Blue on Abdomen and under tail

- **Black-winged Lory**
  - Eos cyanogenia
  - CITES Appendix II
  - IUCN: VU
  - Head: 1. Bluish-purple band from eye to side of neck
  - Body: 2. Black flanks and thighs
  - Wing: 3. Black patch on wings

- **Blue-streaked Lory**
  - Eos reticulata
  - CITES Appendix II
  - IUCN: NT
  - Head: 1. Bluish-purple band from eye down to base of neck
  - Body: 2. Upper back blue-black streaked with violet-blue

---

Image Source adapted from: Environment Canada

© TRAFFIC South-East Asia 2008

"Check current conservation status at [www.cites.org](http://www.cites.org), [www.iucnredlist.org](http://www.iucnredlist.org) and [www.birdlife.org/datazone/search/species_search.html]

January 2008
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

Distinguishing Features:
- Deep blue crown (may be difficult to see on females)
- Triangular patch of golden yellow (may be difficult to see on females)
- Black bill
- Brown eyes
- Greyish-green legs and feet

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

Traded as: Live animals for the pet trade

International Conservation Status:
- CITES Appendix II
- IUCN: LC

Other Names:


January 2008
Lorius garrulus - Chattering Lory

Other Names: Nuri Ternate (Indonesia)

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

Physical Characteristics: Length: 30cm

Distinguishing Features:
- Variable yellow patch on mantle suffused with green
- Yellow band on underwing-coverts
- Rose-red band across underside
- End of tail blackish green
- Black cap on head
- Yellow bib

Similar to:
- Lorius chlorocercus
  Yellow-bibbed Lory
  CITES Appendix II

Traded as: Live animals for the pet trade

International Conservation Status:
CITES Appendix II
IUCN: EN


January 2008
**Lorius lory - Black-capped Lory**

**Black-capped Lory**

**Other Names:**

**Distribution:** West Irian, Indonesia; Papua New Guinea

**Physical Characteristics:** Length: 31cm

**Distinguishing Features:**
- Violet coloured legs
- Yellow underwing
- Violet coloured areas on back (variable and may extend to the front)
- Grey coloured cere (area above the beak around the nostrils)
- Black cap
- Violet coloured areas on back (variable in extent)
- White coloured cere (area above the beak around the nostrils)

**Similar to:**
- Lorius hypoinochrous - Purple-bellied Lory
  - Dull red

**Traded as:** Live animals for the pet trade.

**International Conservation Status:**
- CITES Appendix II
- IUCN: LC

**Credit:** James Compton / TSEA

May 2008

© TRAFFIC Southeast Asia 2008

**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

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

**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 novaeselandiae undulata* - Boobok Owl (Norfolk Island)
- *Tyto soumagnei* - Madagascar Red Owl (Madagascar)

**IUCN:** Varies - up to CR

**Check current conservation status at** [www.cites.org](http://www.cites.org), [www.iucnredlist.org](http://www.iucnredlist.org) and [www.birdlife.org/datazone/search/species_search.html](http://www.birdlife.org/datazone/search/species_search.html)
### Identification of Crocodile skins

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

*All at least CITES Appendix II*

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

© TRAFFIC Southeast Asia 2008
**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  
- Webbed Fingers  
- - Eye greenish  
- Large scutes (scales) separated by skin

**Alligator sinensis**  
**Chinese Alligator**  
*CITES Appendix I*  
*IUCN: CR*

**Other names:** Chinese Alligator (English), Yangtze Alligator (English), E Yu, Tuo, Tou Lung, Yow Lung  
**Distribution:** China (Anhui, Jiangsu, Zhejiang)  

**Physical Characteristics:** Length: Up to 1.8m  
- 6 scutes (scales) across the back  
- Fingers not webbed  
- - Eye brownish  
- Large scutes (scales) in 4 rows (2+2-4-4) in contact with eachother

**Caiman crocodylus**  
**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  
- Small lump (tubercle) on eyelid  
- - Eye brownish  
- Large scutes (scales) in 4 rows (2+0-4-4) in contact with eachother

---

*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:**
- 18 - 20 double crested scutes (scales) on top of tail
- 6 - 9 scutes (scales) across the back
- Two ridges on snout
- Wrinkled eyelid
- Eye greenish
- Four large scales, one small scale on each side
- No scale rows

---

**Crocodylus mindorensis**  
Philippine Crocodile

- **CITES Appendix I**  
- IUCN: CR

**Other names:** Philippine Crocodile (English)

**Distribution:** Philippines

**Physical Characteristics:** Length: Up to 3m.

**Distinguishing Features:**
- 18 - 20 double crested scutes (scales) on top of tail
- 8 - 10 scutes (scales) across the back
- Two ridges on snout
- Wrinkled eyelid
- Eye greenish
- Two rows of scales
- 8 - 10 scutes (scales) on top of tail
- Four large scales, one small scale on each side
- Two rows of scales
- Row 1. Two rows of scales
- Row 2. Two rows of scales
- Row 1. Two rows of scales
- Row 2. Two rows of scales

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

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

© TRAFFIC Southeast Asia 2008

All Images Credit: Environment Canada

Crocodylus skin on sale  
Credit: TRAFFIC Southeast Asia

March 2008
**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:**
- No hump on snout
- 19 - 21 single crested scutes (scales) on top of tail
- No large scales, but may have 1 - 4 small scales
- 2 ridges on snout

---

**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:**
- One hump on snout
- 17 - 19 single crested scutes (scales) on top of tail
- One row of scales
- One ridge between eyes (may be hard to see)

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

---

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

---

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

March 2008
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

Distinguishing Features:
- 17 single crested scutes (scales) on top of tail
- One row of large scales on the collar
- Round or oval scales on the flank (side of the body)
- Three rows of two large scutes (scales)
- Two rows of smaller scutes (scales)
- Snout points gradually
- 19 - 20 teeth on lower jaw
- Eyes yellowish brown
- Olive-brown colour with large distinct black blotches from the snout to the tail (blotches may fade with age).

International Conservation Status:
CITES Appendix I
IUCN: EN

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

© TRAFFIC Southeast Asia 2008

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

**Distinguishing Features:**
- Relatively flat, spiny tail
- Body relatively flat
- May have lateral skin folds

**Similar to:**
- Spiny-tailed iguanid lizards from the Americas and Madagascar
- Australian agamid lizards

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

**IUCN:** Varies from CR - LR/LC

**Traded as:**
Live animals for the pet trade and also for traditional medicine

*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

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

**Similar to:**

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

**International Conservation Status:**
All Phelsuma spp. are listed in CITES Appendix II

**IUCN: Varies from CR - LR/LC**

**Traded as:**
Live animals for the pet trade

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

May 2009
**Gekko gecko - Tokay Gecko**

**Tokay Gecko**

**International Conservation Status:**

Not listed

**Other Names:**

**Distribution:** Throughout eastern tropical Asia

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

**Distinguishing Features:**
- Light bluish-grey skin
- Large eyes, pupils vertically slit
- Orange and white spots
- Wide flat toes

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

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

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

**Distinguishing Features:**
- Forked Tongue
- Visible ear opening
- Muscular tail
- Powerful limbs and sharp claws
- Long neck
- Narrow head and pointed snout

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

**International Conservation Status:**
- **CITES Appendix II** except for Varanus bengalensis, V. flavescent, V. griseus, V. komodoensis, V. nebulosus which are **Appendix I**
- **IUCN:** Only 3 listed - V. komodoensis, V. olivaceus: **VU**, V. flavescent: **LR**

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

© TRAFFIC Southeast Asia 2008

- Visible ear opening
- Close-up of back skin of Monitor Lizard viewed through magnification. Actual size of scales: 1mm in juvenile; 2 - 3mm in adult
- Characteristic raised keeled scales each surrounded by small granular scales found on the back of the animal
- The skin of Varanus salvator is commonly found in trade
- Shoe made from Monitor Lizard skin
- Varanus salvator skin
- Varanus salvator in trade
- 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
- Varanus salvator in wine
- Varanus salvator in trade

© TRAFFIC Southeast Asia 2008

© Mark Auliya/TSEA

© Claire Beastall

© Mark Auliya

© Claire Beastall

© Claire Beastall

© Claire Beastall

© TRAFFIC Southeast Asia 2008

© TRAFFIC Southeast Asia 2008

**May 2008**
**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: 320 cm

**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**

- No banded pattern on the body
- No stripes on scales around the mouth

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

**International Conservation Status:**
- **CITES Appendix II**
- **IUCN:** Not listed

"Check current conservation status at www.cites.org, www.iucnredlist.org"
Ophiophagus, *Naja* spp. - Cobras

**Cobras**

**Other Names:**
- Ophiophagus, *Naja* spp.

**Distribution:**
- Africa and Asia

**Physical Characteristics:**
- Length: Up to 585cm

**Other Names:**
- Skins, meat and gall bladders for traditional medicine

**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

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

**Distinguishing Features:**
- Scale in front of the eye (pre-ocular) touches the nostril in cobras, kraits and coral snakes (eye and nostril closer together than in other snakes)
- Only cobras are able to flatten the neck in this way (vertically)
- The loreal scale is missing in the cobras, kraits and coral snakes

**Physical Characteristics:**
- Very large head scales characteristic of *Ophiophagus hannah* (King Cobra)
- Variation in pattern on the back of the neck of *Naja kaouthia* (Monocellate/Monocled Cobra)

**Scale in front of the eye (pre-ocular) touches the nostril in cobras, kraits and coral snakes**

**Naja sputatrix** (Javan Spitting Cobra)

**Cobra skin**

© TRAFFIC Southeast Asia 2008

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

Other Names:

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

Physical Characteristics: Length: Up to 10m

Distinguishing Features:
- Heat sensitive
- 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

International Conservation Status:
- **CITES Appendix II** except *Python molurus molurus* (Indian Rock Python) which is listed in **CITES Appendix I**
- **IUCN**: *Python molurus* - LR

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.

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** in the meat trade
Credit: Bouma Vongsay

**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

**Python Skin Shoes**
Credit: TRAFFIC Southeast Asia

© TRAFFIC Southeast Asia 2008

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

May 2008

© TRAFFIC Southeast Asia 2008
**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

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

**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

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

- **All Marine Turtles are listed in CITES: Appendix I**
- **IUCN:** CR - EN

Distinguishing Features:

- **Cheloniidae**
  - Shell covered with scutes (scales).
  - 1 - 2 claws on the front edge of front limb.

- **Dermochelyidae**
  - Top shell (carapace) has seven keels (ridges) and is covered with leather.
  - Front limb has no claws.

- **Hatchlings**

**Traded as:**

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

**Eggs:**

- Round and white (like a ping-pong ball)

**Egg Diameter:**

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

© TRAFFIC Southeast Asia 2008

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

March 2008
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

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
- Lepidochelys olivacea - Olive Ridley Turtle
  CITES: Appendix I

International Conservation Status:
- CITES: Appendix I
- IUCN: CR

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

© TRAFFIC Southeast Asia 2008

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

January 2008
**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)

**Batagur (Callagur) borneoensis - Painted Terrapin**

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

**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

**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)

**Traded as:**
Eggs and live animals for the pet trade

**International Conservation Status:**

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

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

© TRAFFIC Southeast Asia 2009
**Cuora spp. - Asian Box Turtle species**

**Asian Box Turtle species**

**Other Names:**

**Distribution:** South and Southeast Asia

**Physical Characteristics:** Length: up to 30cm

**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)

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

- **Cuora amboinensis** - Southeast Asian Box Turtle
  - IUCN: VU
  - Length: 22 - 25cm
  - Distribution: Bangladesh; Cambodia; India; Indonesia; Malaysia; Myanmar; Philippines; Thailand; Viet Nam

- **Cuora galbinifrons** - Indochinese Box Turtle
  - IUCN: CR
  - Length: Up to 19.8cm
  - Distribution: Cambodia (?); China; Lao PDR; Viet Nam

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

**International Conservation Status:**
All *Cuora* spp. are listed in CITES Appendix II

**IUCN:** Varies from VU to EN

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

© TRAFFIC Southeast Asia 2009

May 2009
**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

**Distinguishing Features:**
- Top shell (carapace) Grey, brown or black
- Head brown or black
- Thickened scales around the eye
- First central scute wide at top and narrow at base
- Sharp notch at the base of the lower shell (plastron)

**International Conservation Status:**

- **CITES Appendix II**
- **IUCN: EN**

**Traded as:**
Live animals for the meat trade (often in large quantities)

*Check current conservation status at www.cites.org, www.iucnredlist.org*
**Trachemys scripta elegans** - 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

**Distinguishing Features:**
- Long red patch
- Dark green head with yellow stripes
- Very young animal
- Yellowish-orange with a dark mark on each scale (scute)
- Markings vary, but are similar to this
- Scales (scutes) with radiating lines
- Top shell (carapace)
  Green-yellow in young animals, darkening with age to almost black
  Old adult

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

**International Conservation Status:**
Not CITES listed

**IUCN:** Not listed

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

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

*Check current conservation status at www.cites.org, www.iucnredlist.org*
**Testudinidae spp. - Tortoise species**

### Tortoise species

**Other Names:**

- 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

### International Conservation Status:

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

**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

---

**Distribution:**

- Africa (including Madagascar); Americas; Europe; Asia

**Physical Characteristics:**

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

**Distinguishing Features:**

- Solid, often domed top shell (carapace)
- Annual rings on scutes often very clear and well defined
- Wide stumplike or “elephantine” hind feet
- Most can withdraw neck and limbs entirely into their bony shell
- Some species can grow up to enormous size, weighing up to 300kg

**Similar to:**

- Freshwater and marine turtles

**Traded as:**

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

**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:** Freshwater and marine turtles live mostly in water.

---

© TRAFFIC Southeast Asia 2009

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

May 2009
Astrochelys (Geochelone) radiata - Radiated Tortoise

Radiated Tortoise

Other Names:

Distribution: Madagascar; introduced to Mauritius; Réunion

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

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

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

International Conservation Status:
CITES Appendix I
IUCN: CR

Similar to:

Geochelone elegans - Indian Star Tortoise
CITES Appendix II

Geochelone platynota - Burmese Star Tortoise
CITES Appendix II

Pyxis arachnoides - Spider Tortoise
CITES Appendix I

Black rays of star pattern extend in all directions
Top of scutes (scales) sharply angled in adults
Fewer dark rays, creamy-white background
No line linking centre of star pattern
Hinge present in some

Carapace Length: Up to 38cm
Carapace Length: Up to 26cm
Carapace Length: Up to 15cm

Plastron with black triangles
(Bottom shell)

Radiated Tortoise Shell Pattern

* Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA except where indicated.
© TRAFFIC Southeast Asia 2008

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

January 2008
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

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

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

International Conservation Status:
CITES Appendix I
IUCN: CR

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

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

© TRAFFIC Southeast Asia 2008

* Image Source: Environment Canada

* Image Source: Environment Canada

Credit: WWF-Canon / Martin HARVEY

Credit: Kathrin Schmidt

Credit: WWF-Canon / Martin HARVEY

Credit: Sandrine Pantel/TSEA

Credit: Mark Auliya/TSEA

March 2008
**Indian Star Tortoise**

**Other Names:**

**Distribution:** India; Pakistan; Sri Lanka

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

**Distinguishing Features:**
- Black rays of star pattern extend in all directions
- Top of scutes (scales) sharply angled in adults

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

**Similar to:**
- *Geochelone platynota* - Burmese Star Tortoise: CITES Appendix II
  - Fewer dark rays, creamy-white background
  - Carapace Length: Up to 26cm
- *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
- *Pyxis arachnoides* - Spider Tortoise: CITES Appendix I
  - Hinge present in some
  - Carapace Length: Up to 15cm

**International Conservation Status:**
- CITES Appendix II
- IUCN: LR

*Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA (except where indicated).
Plastron*: No line linking centre of star pattern
Plastron*: Image Source: Environment Canada
Plastron*: © TRAFFIC Southeast Asia 2008

*Image Source: Environment Canada
All Photographs: Chris Shepherd/TSEA (except where indicated).
Plastron*: No line linking centre of star pattern
Plastron*: Image Source: Environment Canada
Plastron*: © TRAFFIC Southeast Asia 2008

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

January 2008
Geochelone platynota - Burmese Star Tortoise

Burmese Star Tortoise

Distribution: Myanmar

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

Distinguishing Features:
- Fewer dark rays, creamy-white background
- Top of scutes (scales) more rounded
- No line linking centre of star pattern

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

International Conservation Status:
- CITES Appendix II
- IUCN: CR

Similar to:
- Geochelone elegans - Indian Star Tortoise
  - Black rays of star pattern extend in all directions
  - Carapace Length: Up to 38cm

- Astrochelys (Geochelone) radiata - Radiated Tortoise
  - Black rays of star pattern form fan-like design on about one quarter of the scutes (scale)
  - Carapace Length: Up to 40cm

- Pyxis arachnoides - Spider Tortoise
  - Hinge present in some
  - Carapace Length: Up to 15cm

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

January 2008
**Geochelone (Stigmochelys) pardalis - Leopard Tortoise**

**International Conservation Status:**
*CITES Appendix II*

**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

**Distinguishing Features:**
- 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.

---

*Check current conservation status at www.cites.org, www.iucnredlist.org*
Malacochersus tornieri - Pancake Tortoise

Pancake Tortoise

Other Names:

Distribution: Kenya; Tanzania; Zimbabwe

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

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.

Traded as: Live animals for the pet trade.

International Conservation Status:

CITES Appendix II
IUCN: VU

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

© TRAFFIC Southeast Asia 2008

All Photographs Credit: Mark Auliya/TSEA

Pancake Tortoise on sale in a pet shop
Credit: Mark Auliya/TSEA

March 2008
**Manouria emys** - 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

**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

**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)

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

**Traded as:**
Live animals for meat and the pet trade

**International Conservation Status:**

**CITES Appendix II**

**IUCN: EN**

**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

There are two subspecies of *Manouria emys*:

- Pair of scales (scutes) just behind the front legs do not touch in the centre
- Pair of scales (scutes) just behind the front legs touch in the centre

**Front scutes always protrude.**

**Scutes square, wide seams between them**

**Bottom shell (plastron)**
Credit: Mark Auliya/TSEA

**Scutes above the tail deeply notched**

**Bottom shell (plastron)**
Credit: Mark Auliya/TSEA

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

© TRAFFIC Southeast Asia 2009

May 2009
**Manouria impressa - Impressed Tortoise**

**Impressed Tortoise**

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

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

**Physical Characteristics:** Length: up to 33cm

**Distinguishing Features:**

- Yellowish head
- Top shell (carapace) golden brown and translucent
- Top and side scales (scutes) concave (depressed)
- Serrated and upturned edge to top shell (carapace)
- Spurs visible on male only

**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

**International Conservation Status:**

CITES Appendix II

**IUCN:** VU

**Traded as:** Live animals for meat and the pet trade

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

**Distinguishing Features:**
- Yellow dots on head and neck
- Nose is trunk-like and very straight
- Carapace (top shell) rounded in shape
- Front edge of carapace has a rough texture with small bumps (tubercles)

**Similar to:** Dogania subplana - Malaysan Softshell Turtle

**IUCN:** LR

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

**Traded as:** Live for the meat trade

- 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)
- Front edge of carapace smooth with no rough texture

**International Conservation Status:**

- **CITES Appendix II**
- **IUCN: VU**

**Other Names:**

**Distribution:**

**Physical Characteristics:**

**Distinguishing Features:**

**Similar to:**

**Traded as:**

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

© TRAFFIC Southeast Asia 2008

June 2008
**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

**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

**Traded as:**
Live animals for the pet trade and for the meat trade

**International Conservation Status:**
Not CITES listed

**IUCN: VU**

**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

**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

**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

**Credit:** Bui Dang Phong

**Check current conservation status at [www.cites.org](http://www.cites.org), [www.iucnredlist.org]**
Dyscophus antongilii - Tomato Frog

**Tomato Frog**

**Other Names:** Northern Tomato Frog

**Distribution:** Madagascar

**Physical Characteristics:** Length: 6 - 10.5cm

**Distinguishing Features:**
- Back has no dark pattern, but may have darker speckles
- Skin fold
- Rear foot partly webbed
- Colour varies, but always more red than *Dyscophus guineti*

**Similar to:**
- *Dyscophus guineti*
  - Southern Tomato Frog / False Tomato Frog
  - Not listed in CITES
  - Length: 6.4 - 10cm
  - Dark speckles
  - Dark brown markings on the back (may be faint or absent)
  - Skin fold
  - Rear foot partly webbed
  - Colour varies, but always lighter red than *Dyscophus antongilii*

**International Conservation Status:**
- **CITES Appendix I**
- **IUCN: NT**

**Traded as:**
- Live animals for the pet trade

---

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

**Distinguishing Features:**
- Long blunt snout
- Five rows of large scales on the body
- Dorsal fin located far back on the body
- Very short barbels
- Pink spot on the gills
- Small Caudal fin

**Similar to:**
- Scleropages jardini Jardin’s Arowana
  - Seven rows of large scales on the body
  - Very short barbels
  - Pink spot on the gills
  - Total Adult Length: 100cm

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

**International Conservation**

**CITES Appendix I**

Captive-bred animals can be traded ONLY IF:
1. The breeder is registered with the CITES Authorities
2. If the animal is tagged with a microchip, AND
3. If the animal is at least F2 (captive bred second generation)

**IUCN:** EN

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

**Credit:** Australia Customs January 2008

---

**Osteoglossum bicirrhosum - Silver Arowana**

**Similar to:**
- Scleropages jardini Jardin’s Arowana
  - Five rows of large scales on the body
  - Dorsal fin located far back on the body
  - Anal fin located far back on the body
  - Large Caudal fin (tail)
  - Total Adult Length: 100cm

**Similar to:**
- Osteoglossum bicirrhosum Silver Arowana
  - Dorsal fin is longer and extends all the way to the caudal fin
  - Small Caudal fin
  - Anal fin is longer and extends all the way to the caudal fin
  - Total Adult Length: 120cm

---

All Photos (except where indicated) credited to: Tan Heok Hui

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

Distinguishing Features:

- Body colour and shape changes with age as shown in this juvenile.
- Most have bright yellow margin to the tail fin.
- All have distinctive lines running through the eye.

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.

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

International Conservation Status:  
CITES: Appendix II  
IUCN: EN

© TRAFFIC Southeast Asia 2008

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

**Distinguishing Features:**

- Horse-shaped head
- Prehensile tail

**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

**Traded as:**

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

**International Conservation Status:**

- **CITES Appendix II**
- **IUCN:** Varies up to **EN**

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

January 2008
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

Distinguishing Features:

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

Mantle may be brightly coloured

Dead (shell only)
Inner shell not pearl-like and shiny

Traded as:
Meat, shells and live for the aquarium trade

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

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

Credit: Aileen Tan Shau-Hwai
Credit: Mauri RAUTAKRI - WWF/Canon
Credit: Alain COMPOST / WWF-Canon
Credit: Claire Beastall
Credit: Claire Beastall
Credit: Claire Beastall

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

May 2009

© TRAFFIC Southeast Asia 2009
**Nepenthes spp. - Pitcher Plants**

**Pitcher Plants**

**Other Names:**

**International Conservation Status:**

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

**IUCN:**

- *Nepenthes rajah*: EN
- *Nepenthes khasiana*: Not listed

**Distribution:**

- From northern Australia throughout Southeast Asia to southern China

**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.

**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 khasiana*
  - IUCN: Not listed
  - Distribution: India

**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.

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

**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.

© TRAFFIC Southeast Asia 2008

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

July 2008
Orchidaceae

Orchids

Other Names: Anggerik (Malaysia)

Over 25,000 species known - identification is difficult but flowers do 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)

Slipper Orchids: Eg. Phaphiopedilum spp. and Phragmipedium spp.

Typical flower structure:

Front view

2 sepals fused (not visible from the front)

Back view

2 sepals - fused

CITES Appendix I listed Orchids*

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

CITES Appendix I listed Orchids* found in Southeast Asia

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

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

### Orchids

**International Conservation Status:**

**CITES Appendix II: All Orchids**

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

---

### All Wild Orchids require a CITES Permit...

<table>
<thead>
<tr>
<th>Wild</th>
<th>Artifically Propogated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity:</strong></td>
<td>Usually shipped in greater numbers (more than 20 specimens)</td>
</tr>
<tr>
<td><strong>Size:</strong></td>
<td>Specimens similar in size</td>
</tr>
<tr>
<td><strong>Roots:</strong></td>
<td>Usually healthy, growth may be in the shape of the container. Artificial growth medium may be evident (charcoal, agar, coconut husk, sphagnum moss etc.)</td>
</tr>
<tr>
<td><strong>General Appearance:</strong></td>
<td>Healthy with no damage to leaves</td>
</tr>
<tr>
<td>Unhealthy, leaves may be mottled or dull in colour, often damaged (insect, mould, algae, lichen)</td>
<td></td>
</tr>
</tbody>
</table>

---

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

#### Wild Orchid Roots:

- 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:

- 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:

- Uneven growth
- Often with dried inflorescent or pod.

#### 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.

---

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

---

*Check current conservation status at www.cites.org, www.iucnredlist.org*  
January 2008
**Gonystylus spp. - Ramin spp.**

**International Conservation Status:**
- CITES Appendix II
- IUCN: 15 species listed VU

**Ramin**

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

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

**Steps towards Identification:**

1. **Take a sample of the wood to examine.**
   - Cut this from a transverse section
   - Use a very sharp knife to trim a small area from the surface of the transverse section

2. **Examine the trimmed surface.**
   - Use a 14x hand lens to examine the trimmed surface
   - 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

- **Similar to:**
  - Gonystylus sp.
  - Alstonia scholaris
  - Hevea brasiliensis
  - Dyera costulata
  - Endospermium malaccense

**Notes:**
- 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.

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

© TRAFFIC Southeast Asia 2008
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 1 - 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

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

ASEAN-WEN receives support from the United States Agency for International Development (USAID) and U.S. Department of State, as well as in-kind donations from ASEAN Member Countries.

ASEAN WEN Support Programme

TRAFFIC is a joint programme of

© TRAFFIC Southeast Asia 2008

Wildlife Alliance works with local governments, communities and other like-minded NGOs which aim to conserve the environment and stop the illegal wildlife trade by directly protecting wildlife in the field, reducing consumer demand, and providing alternative livelihoods for local communities.

Wildlife Alliance
1150 17th Street NW
Suite 403
Washington, DC
20036
USA
Tel: +1 202 223 6350
Fax: +1 202 223 6352
Website: www.wildlifealliance.org

FREELAND Foundation
591 UBC II Bldg., 10th Fl., Room 1001
Soi Sukhumvit 33, Sukhumvit Road
North Klongton, Wattana
Bangkok 10110
THAILAND
Tel: +662 204 2719 to 21
Fax: +662 204 2722
Website: www.freeland.org

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, Viet Nam and Thailand.