WILDLIFE RESCUE, ANIMAL HANDLING AND

RELEASE PROCEDURES











# WILDLIFE RESCUE, ANIMAL HANDLING AND RELEASE PROCEDURES A guide for Buddhist monks in Cambodia

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#### INTRODUCTION

## THE ANGKOR CENTRE FOR CONSERVATION OF BIODIVERSITY (ACCB)

The Angkor Centre for Conservation of Biodiversity (ACCB) is a wildlife rescue and conservation centre located at the base of Kbal Spean mountain, and aims to contribute to the conservation of wildlife and biodiversity in Cambodia.

The initial idea to build a rescue centre for wildlife near the temples of Angkor originated from a dedicated Cambodian Biologist of international reputation, Mr. Sam Veasna. With the initial support of the German zoo Allwetterzoo Münster and the Zoological Society for the Conservation of Species and Populations (ZGAP) in Germany, ACCB could finally start operations in 2003.



### WHY DOES ACCB RESCUETHE WILD ANIMALS?

#### Animals are being rescued and kept at ACCB for three importance reasons:

#### I- Rehabilitation before release

Before releasable at any suitable time, the animal is examined to make sure it is healthy and well, receives veterinary treatment (if needed), practice to find food on its own, and to climb or fly. It is also important that it learns to recognize and avoid threats, like predators or humans

#### 2- Rescued animals which cannot be released

In some cases, the animals arrive at ACCB with severe injuries (example, a bird with a severe fracture of the wing), tame animals (not afraid of humans), these kind of animals would find a permanent home at ACCB

#### 3- Species conservation

Some very rare and endangered animals are being kept at ACCB to prevent from going extinct in the wild (they can re-produce every year, but ACCB makes sure that they do not lose their ability to survive in the wild), and with hope for the future when the protection of their natural habitats will improve, then ACCB will release them back into the wild

#### SECTION I: KEEPING WILD ANIMALS AT HOME IS ILLEGAL BY LAW

The Cambodian law is very clear about the fact that wildlife is protected and activities like hunting, trapping, poaching, trading and keeping wildlife as pets are illegal in the vast majority of cases.

The Cambodian Law on Forestry in 2002 (Chapter 10: Articles 49- 50), states that:

#### Article 49:

It is strictly prohibited to hunt, harm or harass all kind of wildlife using all types of dangerous means, hunting during the prohibited season, and hunting in protected zones.

In the case of rare and endangered wildlife species, hunting, harassing, netting, trapping, poisoning, transporting, trading, exporting and importing, and keeping them in a zoo or family house is generally prohibited.

#### Article 50:

In the case of common wildlife species, it is only allowed to keep them in a zoo or family house, export and import them if a permit to do so was issued by the Forestry Administration.

## **SECTION 2: SAFETY FIRST**

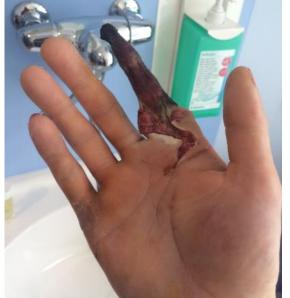
#### Your safety comes first!

- I. Venomous animals: snakes, slow lorises
- 2. Zoonotic diseases (= diseases shared between animals and humans)
- 3. Injuries caused by animals

If you are not sure that you can catch/transport/handle an animal without putting yourself or the animal in a dangerous situation, don't do it!

- Most important rule: never handle a snake if you can't identify it for sure as a harmless species!
  - Handling venomous snakes requires a lot of practice and cannot be taught in a short training.





#### Some venomous/ dangerous snakes in Cambodia:

(Illustrated pictures on page 7, upper row from left to right)

- Malayan Pit Viper (Calloselasma rhodostoma)
- 2. Eastern Russell's Viper or Siamese Russell's Viper (Daboia siamensis)
- 3. White-lipped pit viper (Trimeresurus albolabris)
- 4. Small-spotted Coral Snake (Calliophis maculiceps)

#### (Illustrated pictures on page 7, lower row from left to right)

- 1. Malayan Krait or Common Krait or Blue Krait (Bungarus candidus)
- 2. Banded Krait (Bungarus fasciatus)
- 3. King cobra (Ophiophagus hannah)
- 4. Monocellate Cobra or Monocled Cobra (Naja kaouthia)



- Does it make sense to remove a snake or kill it to keep people safe?
  - Most snake bites occur while attempting to catch or kill a snake
  - Only about 5% of the snake species occurring in Cambodia are dangerously venomous
  - Snakes are territorial → After removing a snake another snake will occupy it's territory, and that might be a bigger or a more dangerous one
  - If relocated, snakes will try to come back



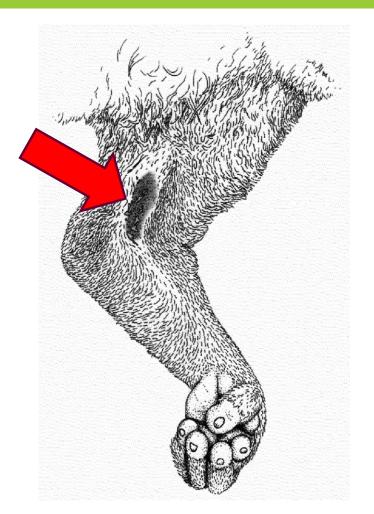
## Venomous animals: Slow Loris

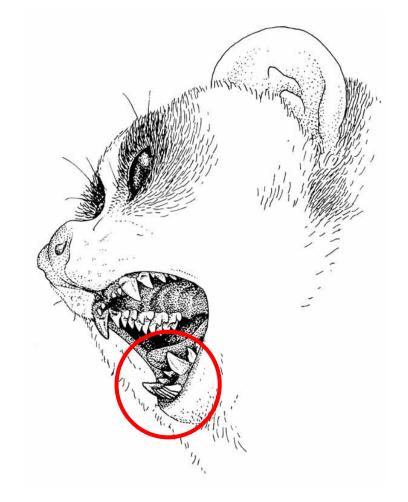
- Slow Loris have venom glands on their arms. They mix the venom with their saliva and can deliver a venomous bite
- Not all people react equally to the venom. The effects can go from a painful, swollen wound to death
- Always use thick leather gloves (welding gloves)
  - Still be careful: loris can bite through the gloves



# Venomous animals: Slow Loris

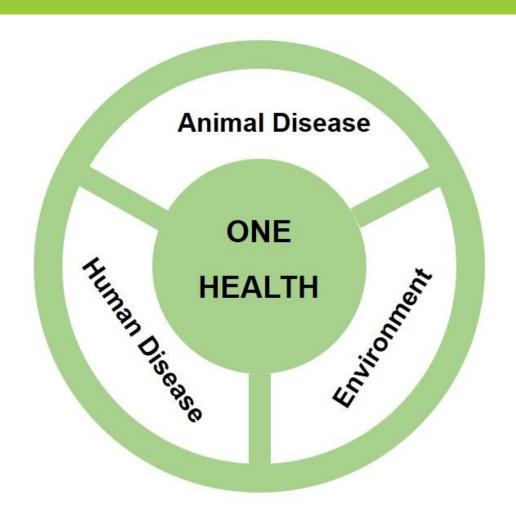






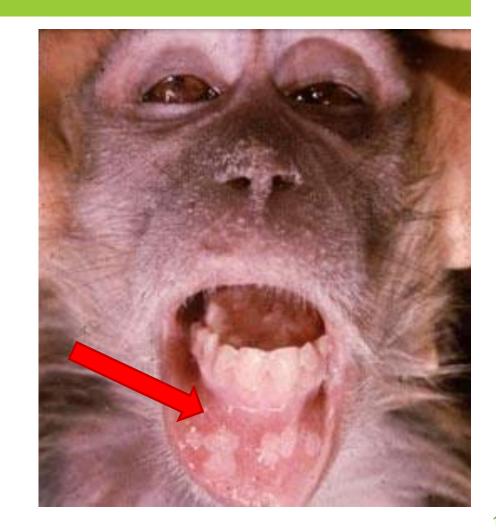
## Zoonotic diseases: diseases transmitted between animals and humans

- Every animal species has it's own diseases
  - Not all diseases are zoonotic
  - But almost all species can have zoonotic diseases
    - Careful especially with monkeys and gibbons!
- Of course not every individual animal has a disease
- ...but sometimes infected animals can look healthy
  - Always protect yourself when handling animals



# Example: Herpes B Virus of macaques

- About 8 out of 10 macaques are infected
  - Most don't get sick
  - Some get small lip ulcers
- Herpes B can be transmitted to humans through macaque bites or scratches
- Disease in humans is very rare, but it's deadly
  - Brain disease



# Example: Avian Influenza



- Affects domestic chicken and ducks, but also some wild birds
  - More common in ducks, birds of prey
  - Don't keep wild birds next to domestic birds!
  - Don't feed wild animals with raw chicken/duck meat or eggs!
- Can be transmitted to humans through the air
- Can cause deadly lung disease in humans

## Example: Common Parasites in Birds

- Most animals, including humans, carry many different pathogens.
- If the animal is healthy and in good condition, it can often carry these diseases and parasites without being affected, But this immunity takes time to build up.
  - Parasites can cause serious health problems in birds, just as they can affect other animals and people.
  - More than just worms or mites, parasites can come in many forms (see pictures).
  - If recognized early, most parasitic infections in birds can be treated







# Example: Rabies

- Can affect all mammals, but most often domestic dogs, wild carnivores (otters, civets...) and bats
- Transmission through bite wounds and contact with saliva
- Rabies is a fatal but preventable disease in both animals and humans. Appropriate medical care, as soon as possible after potential exposure, before symptoms start, is crucial
- A vaccine is available, but treatment at the hospital as soon as possible after potential exposure is still required

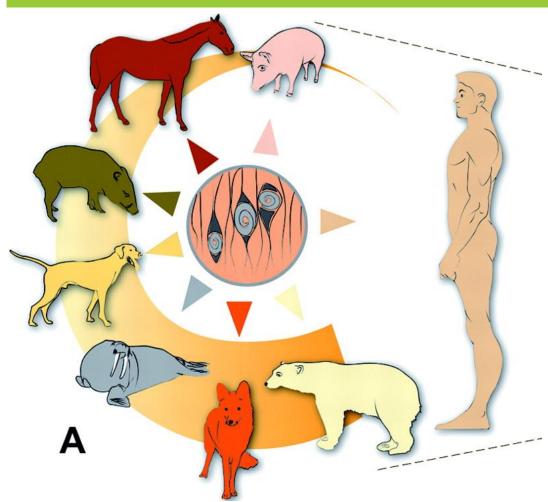


# Example: Reptile-associated Salmonellosis

- All reptiles (snakes, turtles, lizards...) have a bacteria called Samonella in their intestines
  - It does not make them sick
- Salmonella can be transmitted to humans if they eat reptiles or through contaminated food
  - Always wash hands after touching reptiles!
- Causes severe diarrhea, stomach pain and vomiting in humans, can be deadly in rare cases



# Example: Trichinella



Trichinella is a parasitic worm of pigs, wild pigs and carnivores (cats, civets, bears...)

Can be transmitted to humans if they eat meat of these animals

Don't eat meat from wild animals!

It causes muscle pain, swelling of the face, fever, and sometimes death due to brain or heart disease

## General rules to avoid zoonotic diseases

- Only handle an animal if you are sure you can do it safely
- Avoid direct contact with wild animals if it's not absolutely necessary. Don't touch wild animals "just for fun"
- Always wash your hands with soap after touching animals
- Avoid contact with animal feces, blood, urine or saliva: use gloves
- Use a facemask, especially when handling birds or primates
- Use latex gloves, especially when handling mammals or reptiles
- Don't eat meat or any other parts of wild animals
- Don't keep wild animals near places where you eat or prepare food

# Things to have with you when handling animals















# Injuries caused by animals: bite and scratch wounds

- I. Wash any wound with water and soap as soon as possible
  - Wash for 15 minutes if caused by a mammal!
- 2. Disinfect with wound disinfectant (for example Betadine)
- 3. Cover with a bandage impregnated with wound disinfectant
- 4. Go to see a doctor if:
  - The wound was caused by a mammal (you need rabies vaccination within 24 hours)
  - The wound was caused by a venomous snake
  - The wound is large or deep
  - The wound is very painful, gets swollen or infected
  - You start feeling sick

# SECTION 3: HANDLING (CATCH AND RESTRAINT) TECHNIQUES FOR THE MOST COMMONLY ENCOUNTERED ANIMALS

If you are not sure that you can catch/transport/handle an animal without putting yourself or the animal in a dangerous situation, don't do it!

An animal can die because of stress: always keep handling time as short as possible!

# How stress can kill: Capture Myopathy

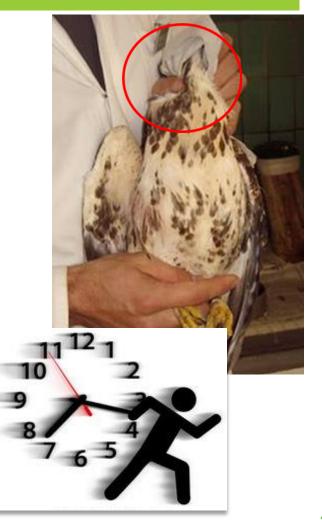
- Stress → the body temperature rises → the muscles get damaged by the heat → the kidneys or the heart fail → the animal dies.
  - Sudden death because of heart failure
  - Or death a few days after the stressful event due to kidney failure
- The disease can't be treated, only prevented
- Species affected: any, but some are more sensitive:
  - Deer, muntjacs
  - Cranes, ibises, peafowl, birds of prey

Prevention: avoid stress and overheating

Avoid chasing an animal around

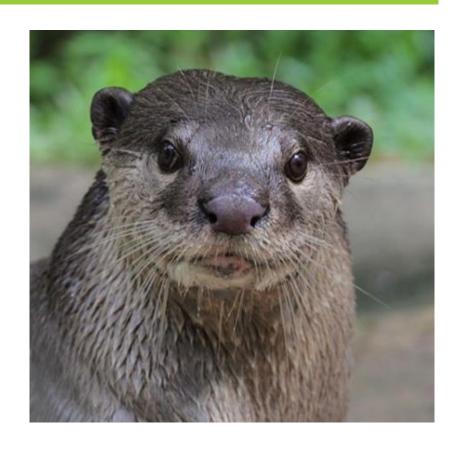
# How stress can kill: Capture Myopathy

- Keep restraint time always as short as possible, ideally always under 5 minutes
  - Have everything prepared before catching an animal
  - No posing for photos while holding the animal!
- Avoid visual stress
  - Cover the eyes of the animal during handling
  - Cover transport boxes with a blanket
- Keep the animal always cool and shaded
- Never transport or keep an animal tied with ropes



# Handling of small carnivores (otters, civets, cats)

- Will try to bite and scratch
  - Welding gloves help, but they can bite through
  - Other aids: nets, thick blankets
- If possible, leave the animal in the same box/cage where it is
- Transfer to another box/cage by letting it walk into it
- Adult large carnivores (bears, leopards...): direct handling is ONLY safe if the animal is sedated!



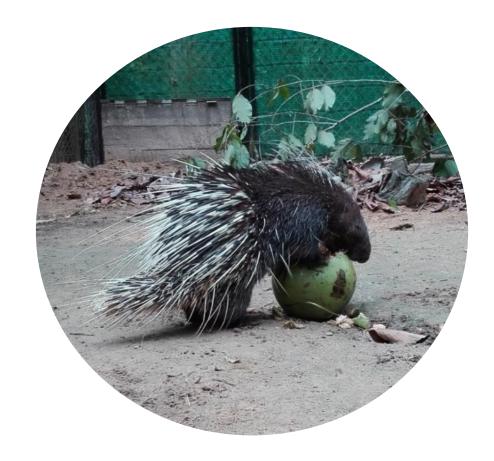
# Handling of small carnivores (otters, civets, cats)





# Handling of Porcupines

- Will try to walk backwards to stab with their quills
  - They can't shoot their quills
  - But the quills are sharp enough to go through skin, clothing, welding gloves and boots
- Porcupines might also bite
- Will get entangled in nets or blankets with the quills → not useful
- Transfer to another box/cage by letting it walk into it, using a broom or wooden board to direct it



# Handling of Primates: macaques, langurs, gibbons

- Will try to bite and can scratch and grab
  - Remember that primates often have zoonotic diseases
- Only very young primates can be handled safely by hand
- Adult primates should be always considered as potentially dangerous!
  - Transfer to another box/cage by letting it walk into it without touching the animal
  - Adult, tame pet primates are best directed into a transport box by their owner. They are usually less aggressive towards people they know



# Handling of Ungulates: deer, wild pigs, wild cows

- Large ungulates are dangerous to handle:
  - They can injure humans with their horns, antlers or tusks
  - Some can also kick or bite
  - They are very strong
- If the antlers break, it will cause severe bleeding
  - Never hold the animals by the antlers
- Especially deer are stress-sensitive: beware of Capture Myopathy!
  - NEVER transport with tied legs if not sedated!
  - Direct the animal into a suitable transport box instead



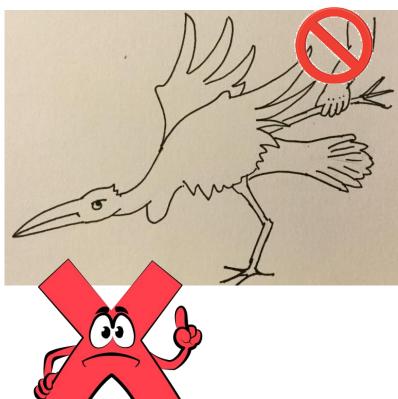
# Handling of Ungulates: deer, muntjac









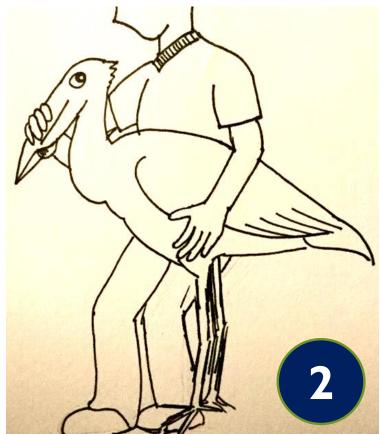


- Never catch or hold a bird by his wings or legs!
  - The bones can easily break

- Catch a bird from above instead, holding his wings closed
- A cloth is very helpful









- Make sure the wings are closed in the right position
- Keep a finger between the bird's legs
- Don't fold the legs forcefully under the body, keep them extended
- Cover the bird's eyes











## Handling Snakes

- Pin the head down (for example with a broom) and then grab behind the head
  - Never use sharp branches to pin a snake down
  - Never use a noose to catch or grab a snake!
- Hold behind the head
  - Always hold the body at the same time to avoid neck injuries
- One person for holding the head + one person for every meter of body length



# Handling Snakes





## Handling monitor lizards and small crocodiles

- Can bite and scratch
- Hold with two hands: one behind the head and one over the hindlegs
- Avoid tying the feet with ropes: can cause toe necrosis
- ONLY crocodiles: tape the snout shut
  - Keep the nares clear so the animal can breath
  - Never do that with any other animal



#### Animals in snares

- Your safety comes first: If you are not sure you can approach the animal without putting yourself in a dangerous situation, don't do it!
  - Animals in snares cannot flight. They are often scared and/or in pain and therefore more likely to attack and more dangerous.
  - For large carnivores and ungulates call the wildlife rescue centre for assistance, they can sedate the animal so the snare can be safely removed



#### Animals in snares

- Snares cause a constriction around a body part an animal found alive in a snare is injured and always needs to be examined by a veterinarian
  - The injury might not be visual or appear superficial, but very often the area where the construction was will start to break down after a few days (pressure necrosis) and the whole site will become a deep, infected wound.



#### SECTION 4: TEMPORARY HOUSING AND TRANSPORT OF WILDLIFE

- I. Suitable cages for temporary housing and transport
- 2. Avoiding stress and hazards
- 3. Offering food and water to the animal

The following text describes how to transport and keep wild animals TEMPORARILY, for a couple of days, in an emergency situation, before they can be transferred to a wildlife rescue centre or released.

## Suitable cages for temporary housing and transport

#### General requirements for any species:

- Large enough to stand up or at least sit on the hocks
- With ventilation holes
- Not completely dark, but it's good to cover the sides
- Floor covered with a blanket, wood or twigs to avoid it from being slippery
- Whenever possible, keep animals in individual boxes (exception: small birds, tortoises, baby animals)



# Suitable cages for temporary housing and transport











## Suitable cages for temporary housing and transport

#### For snakes and monitor lizards:

Two closed rice bags (for up to 2 days)

#### For turtles and tortoises:

- Styrofoam boxes, plastic boxes
- Keep aquatic turtles covered with water
- For transport: put on a wet cloth



## Avoiding stress and hazards

#### Do:

- Place the box with the animal in the shadow
- Cover it with a light blanket or cloth
- Let the animal calm down!

#### Avoid:

- Contact with other animals
- Loud noises and music
- Too many people around
- Fire and smoke
- Ants getting to the animal

# Avoiding stress and hazards



# Avoiding stress and hazards



## Offering food and water to the animal

#### Should you offer food and water?

Always place a bowl with water in the box

Aquatic turtles: give possibility to bathe

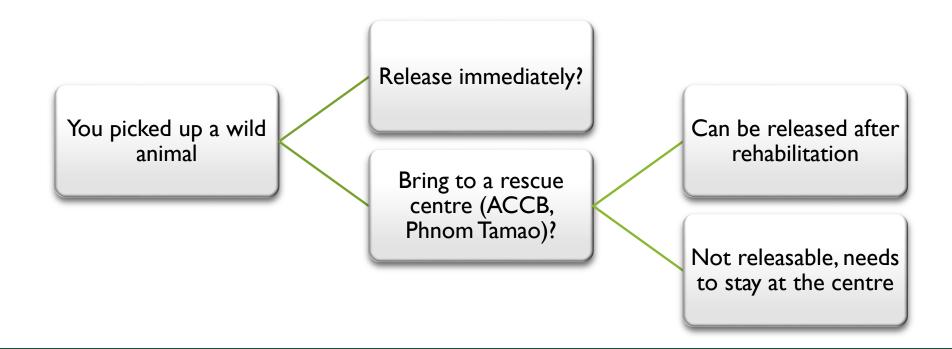
Offer food on a plate to mammals and birds

- All reptiles can be left for at least a few days without food if necessary
- Small birds and small mammals can starve after only a few hours without food!

#### Don't attempt to force-feed!

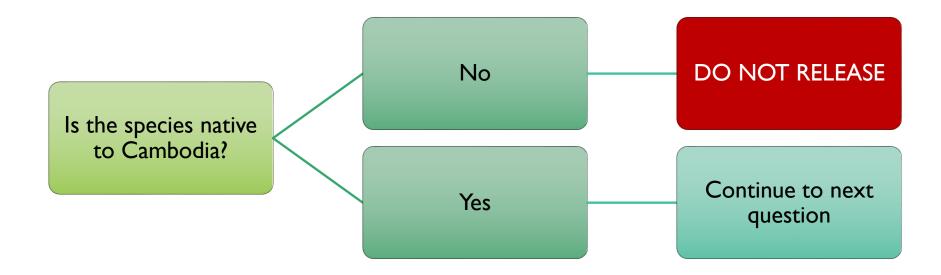


#### SECTION 5: WHAT TO DO WITH CONFISCATED/ RESCUED WILDLIFE



How to decide what is the best option (release or bring to rescue centre) in each case?

# First question: is the species native to Cambodia?



## Why is releasing non-native species a problem?

They might not adapt to the local conditions or food sources and die after release

#### OR...

- They adapt well and become an invasive species
  - Invasive species can cause decline or even extinction of native species if they occupy their habitats, nesting places or food sources
  - Invasive species can carry hidden diseases that might infect and kill native species

## Example of an invasive disease: chytrid fungus

- Globally invasive fungus is causing amphibian plague that kills frogs and other amphibians
- Originated in Asia and spread all over the world during the last years\*
- Amphibians in East and Southeast Asia are not affected by these fungi, but amphibian populations in Asia are still declining
- Responsible for a decline and even extinction of several amphibian species worldwide
- We don't know exactly what is causing the decline of amphibian species in Asia

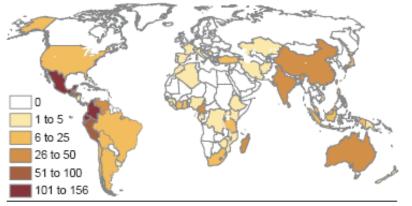
\*S.J. O'Hanlon et al., "Recent Asian origin of chytrid fungi causing global amphibian declines," Science, 360:621-27, 2018.



One-third of amphibians threatened

Nearly 2,000 species of amphibians are currently endangered. Batrachochytrium dendrobatidis, an amphibian chytrid fungus, is thought to be a major reason for the decline in population.

Number of threatened amphibian species, by country, May 2006



SOURCE: The International Union for the Conservation of Nature and Natural Resources

P

## ... some invasive species are already here and causing problems.

#### (Illustrated pictures on page 53, upper row, from left to right)

- 1. Water Hyacinth (Eichhornia crassipes)
- 2. Giant Sensitive Tree (Mimosa pigra)
- 3. Red Swamp Crayfish (Procambarus clarkii)

#### (Illustrated pictures on page 53, lower row, from left to right)

- 1. Golden-apple-snail (Pomacea canaliculata and Pomacea maculate)
- 2. Red-eared Slider (*Trachemys scripta elegans*)
- 3. Nile Tilapia (Orechromis niloticus)

# ... some invasive species are already here and causing problems.



## Which are some of the potentially invasive species you might encounter?

#### (Illustrated pictures on page 55, upper row, from left to right)

- I. Green Iguanas (Iguana iguana), native to South America
- 2. Ring-necked parakeets (Psittacula krameri), native to Africa and India
- 3. Domestic rabbit (Oryctolagus cuniculus), native to Europe
- 4. Common Yabby (Cherax destructor), native to Australia

#### (Illustrated pictures on page 55, lower row, from left to right)

- I. American bullfrog (Lithobates catesbeianus), native to eastern North America
- 2. Guppy (Poecilia reticulata), native to Northeast South America
- 3. Mosquitofish (Gambusia sp.), native to America
- 4. African Oil Palm (Elaeis guineensis), native to Africa

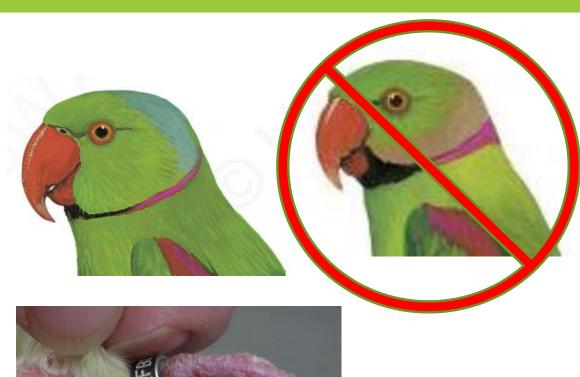
#### These are just examples. Any non-native species could become invasive!

# Which are some of the potentially invasive species you might encounter?

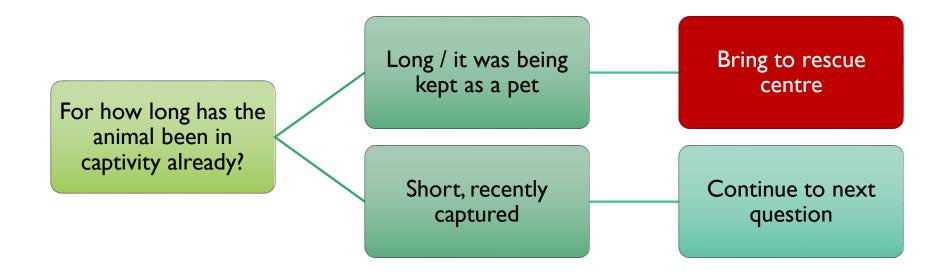


## Example: Alexandrine Parakeet (Psittacula eupatria)

- There are five subspecies
- Only the Siamese Alexandrine Parakeet (Psittacula eupatria siamensis) is native to Cambodia
- Captive-bred Parakeets from Thailand often belong to a different subspecies
  - If released, they could hybridize with the native subspecies or displace them



## Second question: How long has the animal been in captivity already?



## Why are long-captive animals not immediately releasable?

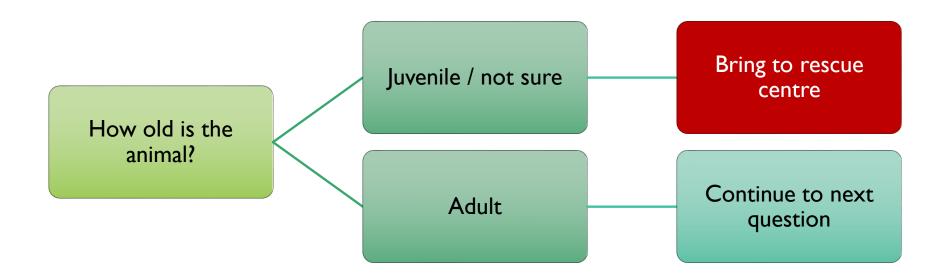
- Animals that have spent prolonged time in captivity need rehabilitation before release
  - They won't recognize natural food sources if they have been fed with a wrong diet in captivity
  - They are usually habituated to humans
  - If kept in small cages, they loose strength and fitness
  - Birds kept tied or in cages usually have damaged feathers

# Why are long-captive animals not immediately releasable?





## Third question: is the animal adult or juvenile?



## Why are juvenile animals usually not immediately releasable?

- The animal might still need it's mother, and if the mother is not available, hand-rearing
  - Exception: most reptiles

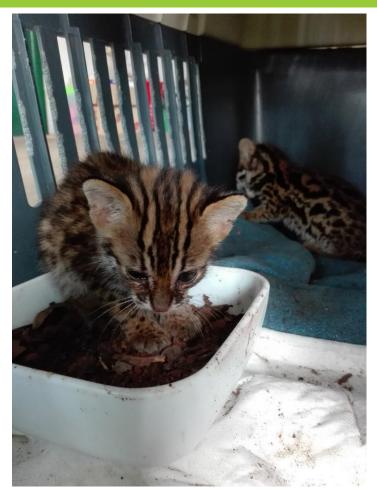
Baby animals are very sensitive and will die after a few hours without food or if they get too cold!

Time matters, immediately transfer to a rescue center!



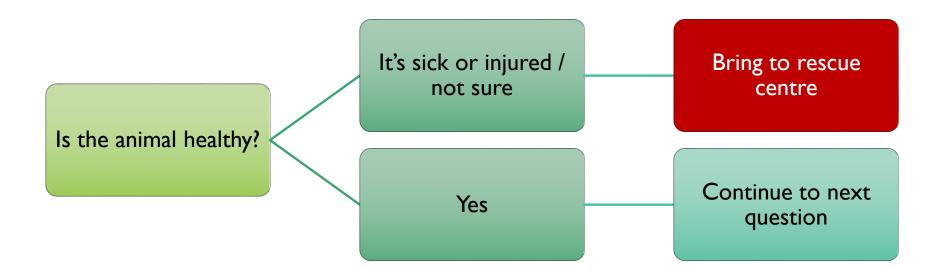


# Why are juvenile animals usually not immediately releasable?





## Fourth question: is the animal healthy and not injured?



## Fourth question: is the animal healthy and not injured?

- Don't release animals if they...
  - Show any signs of disease
  - Have any injuries
  - Have any mutilated body parts (teeth, feathers, beak…)
  - Are very thin or obese
  - Were found in snares
- What might happen if sick animals are released?
  - The animal will be not able to survive in the wild and will die shortly after being released
  - The animal might spread infectious diseases to other wild animals



#### How to recognize sick animals

#### First, observe the animal from a distance

- A heathy animal will be alert, reacting to people and noise
  - Reptiles are generally more passive and will often not move much

#### Sick animals:

- Do not react to the environment, do not stand up and try to escape when approached
- Eyes often kept closed
- Not using all limbs equally (limping, one wing hanging)
- Birds: ruffled feathers
- Aquatic turtles: might float when placed in water





Second, observe the animal from nearby and check for injuries and other signs of disease

- Body condition: is the animal too thin or obese?
- Eyes: sunken, tearing, red
- Nose/beak: liquid or blood coming out of nostrils
- Any wounds and other injuries
- Loss of hair or feathers
- Turtles/tortoises: shell rot









## How to recognize sick animals: shell rot in turtles and tortoises

- Shell rot often appears if the turtle has been kept under bad, stressful conditions
  - Mekong snail eating turtles (Malayemis subtrijuga) are especially prone to it
- The shell is progressively destroyed by bacteria
  - Severe shell rot will kill a turtle/tortoise if not treated
  - Veterinary treatment is possible, but difficult and it often takes months to heal



## How to recognize sick animals: shell rot in turtles and tortoises

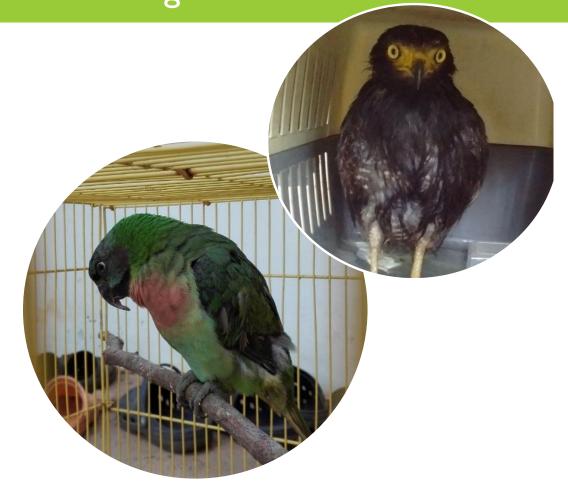






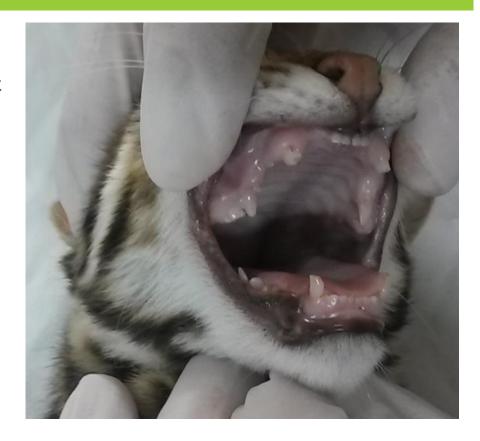
How to recognize sick animals: damaged feathers

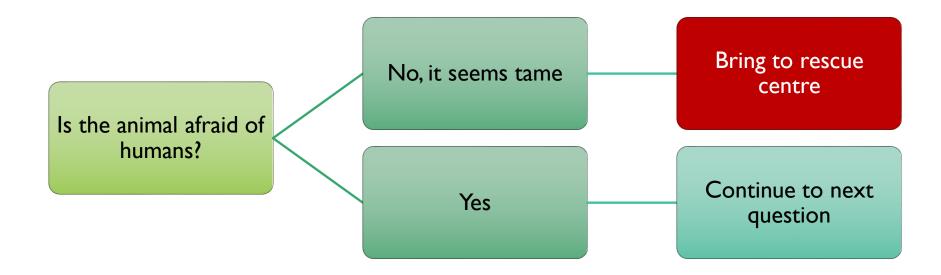
- Birds: all the feathers need to be in perfect condition and the bird needs to be able to fly
  - Feathers are essential for:
    - Flight: escape from predators, find food
    - Protection from cold, heat and water
  - Any bird with clipped, lacking, broken or dirty feathers can not survive in the wild and is not releasable!



## How to recognize sick animals: clipped teeth

- Civets, cats, otters, monkeys, lorises:
  - Sometimes the teeth are clipped in the illegal trade to prevent biting
  - This is extremely painful for the animal and will cause bad infections of the remaining part of the tooth
  - Intact teeth are essential for:
    - Hunting and foraging
    - Fighting and defense
  - Any animal with clipped teeth is not releasable





- Only shy animals that try to escape from humans are releasable
  - Exception: reptiles usually don't get used to humans
- What will happen if tame or habituated animals are released?
  - They don't know how to survive in the wild and will die shortly after release
  - If they don't avoid humans, they will get caught again or get killed
  - They can be dangerous to humans or become a nuisance





- Macaques, langurs and gibbons depend on their mothers to learn the skills to survive in the wild
  - If they have been taken out of the wild and away from their mother at a young age, they are usually never releasable again
  - They depend a long time on their mothers (gibbons: up to 8 years!)



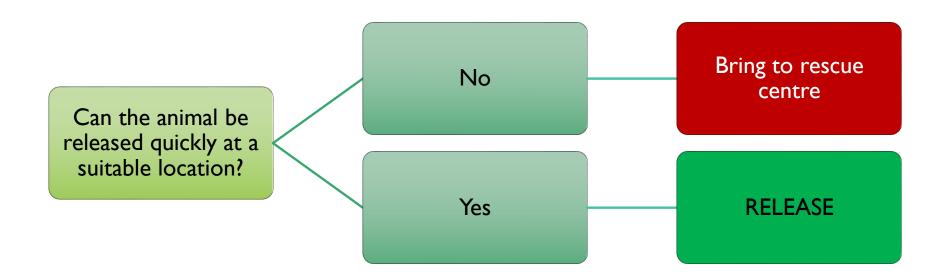
## Example: human-animal conflict caused by human-habituated macaques

- Often macaque troops live near human settlements and have lost their fear of humans
  - Some of these animals are wrongfully released former pets
  - If wild macaques are continuously being fed, they loose the ability to find their own food
- The macaques steal food and objects from humans
- The macaques might enter houses, restaurants, shops...
- The macaques occasionally attack humans trying to get food
  - Macaques can carry very dangerous diseases, transmitted to humans by scratch and bites: Herpes B Virus and Rabies
- The macaques get involved in traffic accidents because they settle near roads

## Example: human-animal conflict caused by human-habituated macaques



# Sixth question: Is there a possibility to release the animal immediately into a suitable habitat?



# Sixth question: Is there a possibility to release the animal immediately into a suitable habitat?

- The release should not be postponed for more than a few hours (or a few days in case of snakes)
  - Stress and time spent without eating/drinking will have a negative effect on the survival chances after release
- Is there a suitable release location nearby?

# SECTION 6: CONSIDERATIONS WHEN RELEASING ANIMALS BACK TO THE WILD

Things to consider before releasing any animal back to the wild:

- Suitable and safe release location
- Time of the day and weather conditions
- Time of year/season

### What is a suitable and safe release location?

#### Suitable:

- The species must naturally occur in the intended release site
- Food availability. Is there enough natural food to support the animal after release?
  - For example, don't release several turtles into a small pond because there wont be enough food for all.
- Is it suitable year round? If the habitat changes it might not be suitable
  - For example if the water source dries up in the dry season it would not be suitable to for turtles

There is not one suitable location for releasing all species of animals: the release location must meet the needs of the individual species to be released.

#### What is a suitable and safe release location?

#### Safe:

- Safe from human interference to minimize recapturing/hunting
  - Keep release sites secret from potential poachers
- No ongoing habitat destruction (logging)
- Safe from domestic animals:
  - Dogs and cats can hunt and disturb wild animals
  - Domestic animals can pose a disease risk for wild animals. For example:
    - Avian Influenza from domestic ducks and chicken infecting wild birds
    - Foot-and-mouth disease (FMD) from domestic cows and buffalos killing banteng and gaur

## What is a suitable and safe release location?



Unsuitable area with lots of human activity, roads, pets and other dangers.



ACCB staff releasing a python in suitable habitat at a safe location.

## Time of the day and weather conditions

#### Time of the day:

- Diurnal species must be released in the morning
- Nocturnal species such as owls should be released at dusk

#### Weather conditions:

- Any stressed animal is best to be transported to the release site and released when it is not too hot. Avoid releasing animals in intense sun/heat
- Releasing animals in heavy rain can have negative impacts, especially for birds

## Time of the year/season

- Wetland species should be released during the wet season
  - This is to ensure there is enough food availability
- Migratory species: some species of birds do not live in Cambodia all year round
  - They must be released when the species is naturally occurring in Cambodia and at the release site
- Not all reptiles are equally active all year
  - Some are inactive during the colder weeks and are best to be released when it's warm enough

The main aim when releasing any animal is to cause as less stress as possible!

Once a suitable release location is chosen and the animal has been transported safely to it, it is important to release it in a way to give it the best start possible

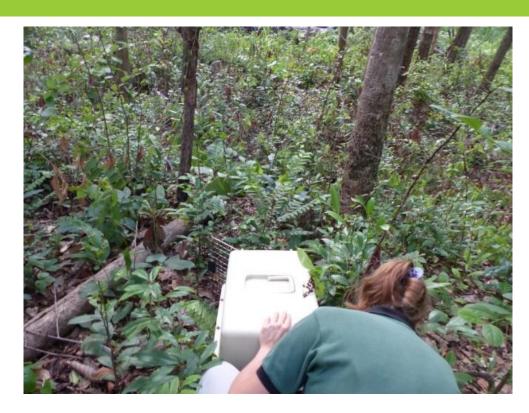




To complete a successful release it's important to:

#### Do:

- Place the transport box on the ground and keep only one person opening the box/ crate (other people should stand as far back so the animal is not aware of them)
- Stay behind the box and open it completely
- Remain calm and quiet (after the box is completely open)
- Allow the animal to come out in its own time. This can take a while. Do not try to push or tip the box!
- Monitor from a distance until the animal has disappeared in to the safe location
- Birds may fly and perch nearby. They can be monitored until they fly away, but always from a distance!



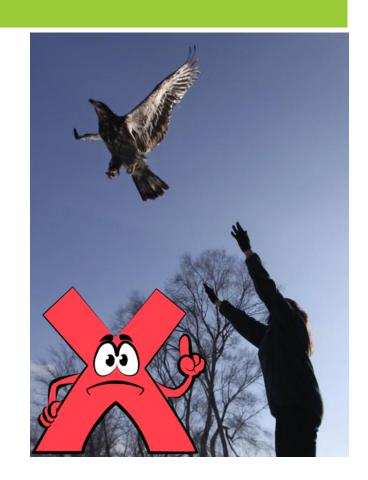
A good example of a single person release. Note the box is facing the safe location/ habitat



Note the box is left alone and monitored from a distance until the animal has left into the safe location

#### Don't:

- Don't take more people than strictly necessary to the release site
- Do not pose with the animals for photographs before release
- Do not stand too close to the box/ crate. This will likely cause the animal to stay in the box/ crate out of fear and create more stress.
- Don't speak loudly because it will scare the animal and it won't leave the transport box
- Don't shake or knock on the box to chase the animal out
- Don't take the animal forcefully out of the transport box
- Don't put any substances like baby powder on the animal
- Don't write or scratch anything into turtle and tortoise shells



## **APPENDIX: LITERATURE REFERENCES**

Stenkat J. et al. 2019. Wildlife and Environment Protection and Conservation, A guide book for Buddhist monks in Cambodia. Angkor Centre for Conservation of Biodiversity

## **APPENDIX: PHOTO REFERENCES**

Artwork on front cover page and back cover page by © Maria Chiara Parolin. All photos courtecy ACCB, except those mentioned below

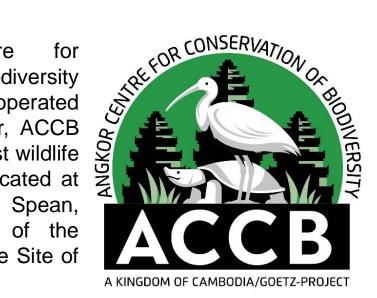
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WWF works in over 100 countries to build a future in which people live in harmony with nature. As the well-being of people, wildlife and the environment are closely interlinked, we take an integrated approach to our work. WWF strives to safeguard the natural world, helping people live more sustainably and take action against climate change.



WWF's Beliefs & Values Programme, which has sponsored this guidebook, engages with leaders and communities based on their spiritual, religious and cultural beliefs and value systems.

The Angkor Centre for Conservation of Biodiversity (ACCB) founded and operated by Allwetterzoo Munster, ACCB is one of Cambodia's first wildlife conservation centres, located at the foot of Phnom Kbal Spean, around 50 km north of the UNESCO World Heritage Site of Angkor.



Each year, several hundred wild animals are rehabilitated and, if possible, returned to the wild. Furthermore, ACCB runs environmental education activities in order to raise awareness about the threats affecting Cambodia's unique and endangered wildlife. This guide book for Buddhist monks has been developed in order to support the capacity building for Buddhist monks involved in animal protection and conservation.