



# Red-eyed Tree Frog

*Agalychnis calidryas*

## Amphibian

**Range:** The Caribbean side of Central America up to Mexico.

**Habitat:** They are found living only in trees (arboreal) in wet, lowland rainforests. They are often found near a source of

water, such as a river or stream.

**Diet:** These frogs are carnivorous (meat-eating) and primarily eat a variety of insects including crickets, grasshoppers, flies, and moths. However, they will eat anything that will fit in their mouth including other amphibians.

**Life span:** 5 years in the wild.

**Description:** They are a small frog with males averaging 2" in length and females averaging 3". They earned their name because of the brilliant red eyes that stick out from their head. The top of their body is a bright green with their bottom covered in a variety of colors including orange, blue, and cream. Their legs are long with toes designed for grasping and sticking to leaves and branches.



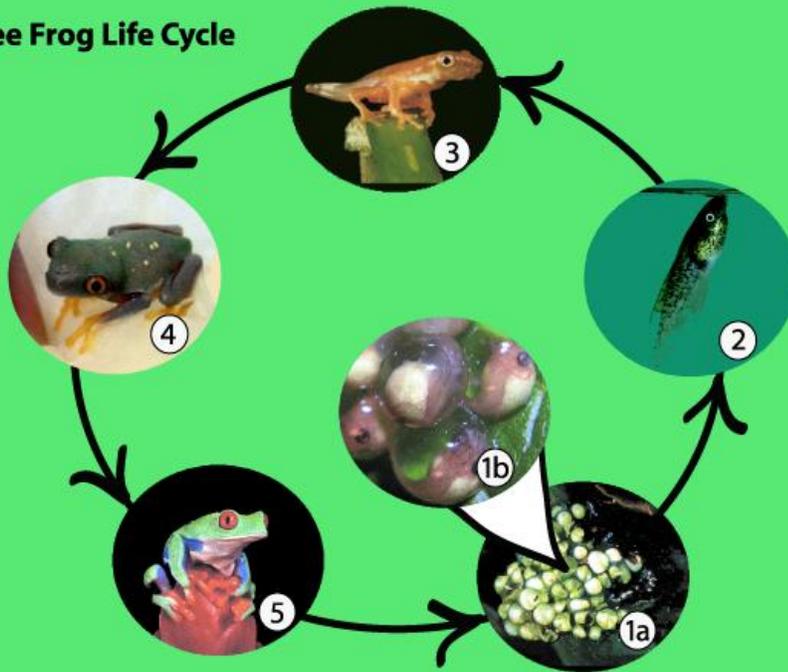
**Breeding:** Females lay a clutch of 20-60 eggs over water on the underside of a leaf and leaves the eggs. When the tadpoles hatch, they fall into the water. Metamorphosis takes about 3 months and once it is complete, the frogs return to the trees.

**Behavior/Adaptations:** Adult red-eyed tree frogs rarely drop to the forest floor and spend most of their lives in the trees because their legs are designed for walking on tree branches, not for swimming. These frogs usually eat at night. They rely heavily on the surprise method for capturing prey. The brilliant colors on their undersides or "flash colors" distract and startle predators, giving the frogs a chance to escape danger. These frogs are also excellent jumpers.

**Predators:** Birds, Snakes, lizards, Wasps, and other insects

**Conservation:** Though the red-eyed tree frog itself is not endangered, its rainforest home is under constant threat.

## Red-Eyed Tree Frog Life Cycle



1. A clutch of 11-75 greenish eggs with a clear gelatinous coat are laid.
2. After 5-11 days the eggs hatch into tadpoles.
3. The tadpole develops its hind and front legs. (40-60 day tadpole stage)
4. The frog is now fully developed and terrestrial, its tail having been absorbed into its body.
5. After about 3 weeks the frog is fully grown and now has the characteristic red irises and elliptical pupils of the adult tree frog.

[http://bioweb.uwlax.edu/bio203/s2007/bergin\\_lind/Reproduction2.htm](http://bioweb.uwlax.edu/bio203/s2007/bergin_lind/Reproduction2.htm)



# Burmese Python

*Python molurus bivittatus*  
Reptile



**Range:** They occur naturally in several countries in Southeast Asia, including Burma, China, Thailand, and Malaysia. They are considered an invasive species in the Florida Everglades.

**Habitat:** Located in hot, marshy areas usually near a permanent water source. They are also found in rainforests, grassy areas, and swamps.

**Diet:** Small mammals, other reptiles, and birds

**Life span:** 20 to 30 years.

**Description:** The largest subspecies of Indian python, the Burmese python can exceed 20 feet in length and weigh more than 200 lbs. Body color and pattern varies between individuals, but is most often a light tan with dark brown to greenish splotches all over the body. These pythons can also come in a variety of color patterns that were created in the captive breeding trade including albino, green, lavender, and "granite".

**Breeding:** Females will lay clutches of 35 to 100 eggs, and unlike many species of snake, the mother remains with the eggs. In order to keep the eggs warm (incubate), the female python wraps her body around the eggs and squeezes her muscles or shivers to raise the temperature of the eggs. During incubation, the female python does not eat. Upon hatching, baby Burmese pythons receive no care from their mother. When Burmese pythons wish to grow they must shed their skin like many other reptiles. It takes 4-5 years for a Burmese python to reach adulthood.

**Behavior/Adaptations:** As a constrictor, the Burmese python does not possess large fangs. Rows of curved teeth allow the python to grasp prey and assist with swallowing. In order to swallow large prey, the jaws of the python can separate and the skin stretches. This allows the snake to eat animals far greater than the size of its head. Like many snakes, the Burmese python can track the body heat of their prey and use this in tracking and capturing prey.

**Predators:** Humans, other snakes, alligators (in Florida)

**Conservation:** In its native range, the Burmese Python is considered threatened. Already heavily exported for the pet trade, python numbers have continued to decline due to the demand for their skin as leather. They are often killed for their meat and because of a fear or distrust of snakes.

## Interesting Facts:

- Monty, the Burmese Python at the Lake Superior Zoo, is an albino. Albino snakes typically do not survive long in the wild because their color pattern makes them obvious to predators. However, they are extremely popular with reptile enthusiasts.

# Burmese Python Life Cycle





# Red-tailed Hawk

*Buteo jamaicensis*

## Bird

**Range:** They can be found in almost all of North America throughout different times of the year.

**Habitat:** Red-tailed Hawks are well adapted to live in almost any environment available in North America. They can be found in fields, on roadsides, in deserts, forests, urban (city) and suburban (suburb) areas, scrubland, and tropical forests.

**Diet:** The majority of the diet is made up of smaller mammals. However, they will also eat birds, reptiles, amphibians, and dead animals (Carrion).

**Life span:** 20-30 years

**Description:** A large hawk with broad, rounded wings and a short tail (typical traits of raptors known as Buteos) which make the Red-tailed Hawk perfectly designed for soaring. The body is usually a chocolate brown on top, and buffy underneath with some dark markings that aid in identification. This hawk receives its name from the rusty red tail which is a trait of adult birds. However, because of the wide geographic range of this bird, there are dramatic color variations. Some types of red-tails never develop a red tail! Others are extremely light or dark in color. There are also several intermediate color patterns that can be observed on birds across the country.

**Breeding:** Red-tailed hawks mate for life. Nests are usually built in the tops of trees, on ledges, or on buildings. Both male and female birds help build the nest or rebuild a nest used in past years. The female lays a clutch of 1-5 eggs and she sits on them to keep them warm (incubates) for up to 35 days before they hatch. The new hatchlings are helpless and spend the next few weeks being fed by their parents until they reach full size and fly (fledge) from the nest. It takes red-tailed hawks 3-4 years to become adults.

**Behavior/Adaptations:** Red-tailed hawks are most frequently seen by people while they perch on the side of the road on telephone poles or fences. Red-tails have very large talons and feet that are heavily protected by scales. These are the primary weapons of the bird and are used for catching and killing prey. They also have a hooked beak that is used for ripping and tearing prey into pieces. Red-tails are territorial and will often chase other raptors, including owls, out of their territory. Red-tails have been observed hunting in pairs. Like other Buteos, Red-tailed Hawks are experts at using thermals to aid in flight. They are often seen soaring in slow circles.

**Predators:** Red-tailed hawk eggs and hatchlings are sometimes preyed on by other raptors and mammals.

**Conservation:** Red-tails are one of the most common raptors in North America. They seem to have greatly benefited from habitats altered by humans, while other raptor numbers are decreasing because of natural habitat loss.

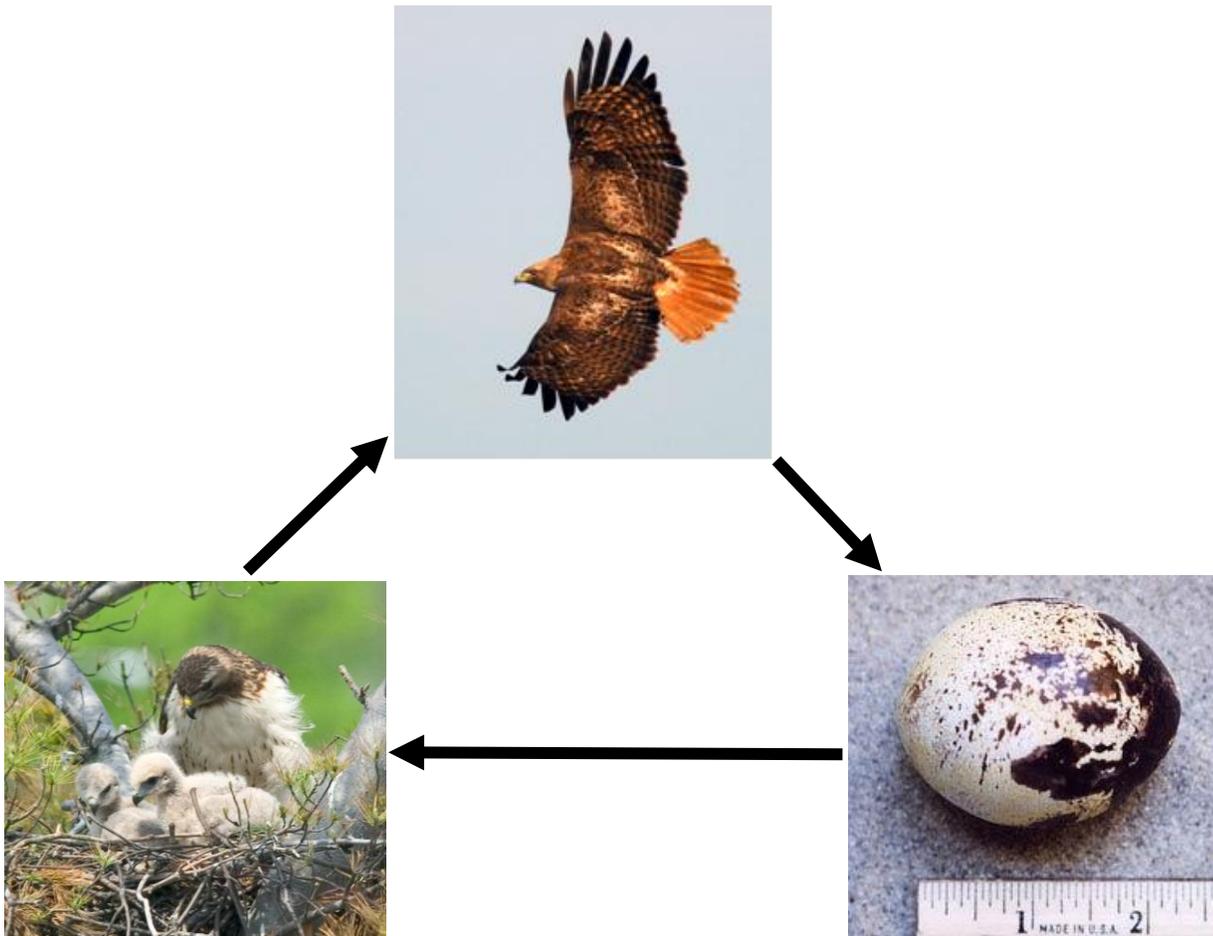
### Interesting Facts:

Red-tails are one of the largest hawks in North America, yet even some of the largest females only weigh about 3lbs!

Like many raptors, Red-tailed hawk females are larger than the males. This size difference is usually attributed to the need to lay and defend eggs.

The call of the Red-tailed Hawk is the most often used raptor call in television and film. Chances are that no matter what species of raptor is portrayed on the screen, you will hear the distinctive scream of the Red-tail being played!

### Red-tailed Hawk Life Cycle



# Madagascar Hissing Cockroach

*Gromphadorhina portentosa*

## Insect

**Range:** Found only on the island of Madagascar off the coast of Africa.

**Habitat:** Floor of tropical forests, often found near rotting logs, river banks, or under forest debris

**Diet:** They are decomposers and will eat anything such as fruits, vegetables, plants, and dead animals.

**Life span:** They can live up to 2 years.



**Description:** A flightless species of cockroach that can reach almost 3 inches in length. Like all insects, their bodies are divided into three segments. However, when viewed from above, the body appears to be one solid piece. Hissing cockroaches are a dark shade of brown. Males have protrusions or "horns" on the front of their body, while females are smooth. The horns are used during territory defense.

**Breeding:** Eggs are stored inside a yellowish-colored egg case called the ootheca. This case is stored either inside the body of the female. The female can produce anywhere from 30-60 nymphs. The nymphs molt 6 times over the course of 7-10 months and after that they are considered adults.

**Behavior/Adaptations:** The hissing cockroach has special holes in the side of its body called spiracles. These spiracles are used for breathing and territory displays. When threatened, the cockroach flattens its abdomen, forcing air out through the holes, which creates the hissing sound. The noise may startle a predator long enough to give the cockroach time to escape.

**Predators:** Mammals, birds, reptiles, amphibians, other insects including a parasite called the cockroach mite

**Conservation:** While not threatened, cockroaches are still stereotyped as a pest animal when out of roughly 3500 species, less than 30 are ever bothersome to humans! These insects are important to the survival of their environments. Hissing cockroaches are often referred to as the "garbage men" or "recyclers" of the forest floor. They devour plant life that would otherwise suffocate the forest floor.

## Interesting Facts:

When they shed their exoskeletons, Madagascar Hissing Cockroaches will eat it for the nutrients.

# Madagascar Hissing Cockroach Life Cycle



Shedding exoskeleton to grow



Eggs being laid



Nymphs hatching from eggs





# Amur Tiger

*Panthera tigris altaica*

## Mammal

**Range:** Amur Tigers are now completely confined to the Amur-Ussuri region of Primorsky Krai and Khabarovsk Krai in far eastern Russia, where it is now protected.

**Habitat:** Tigers live in a wide variety of habitats, and are distributed across a wide range of ecological conditions. They are

known to occur in tropical lowland evergreen forest, monsoonal forest, dry thorn forest, scrub oak and birch woodlands, tall grass jungles, and mangrove swamps. Tigers are able to live in a broad range of temperatures, from warm moist areas, to areas of extreme snowfall where temperatures may be as low as -40 degrees Fahrenheit.

**Diet:** The majority of a tiger's diet consists of various large hoofed species and wild boar. It will also take smaller prey like rabbits, and fish. Tigers may prey on both brown and black bears when hoofed animal populations decrease.

**Life span:** Tigers can live to be between 16 and 18 years old.

**Description:** Tigers have a reddish-orange coat with vertical black stripes along the flanks and shoulders that vary in size, length, and spacing. Some subspecies have paler fur and some are almost fully white with either black or dark brown stripes along the flanks and shoulders. The underside of the limbs and belly, chest, throat, and muzzle are white or light. White is found above the eyes and extends to the cheeks. A white spot is present on the back of each ear. The dark lines around the eyes tend to be symmetrical, but the marks on each side of the face are often asymmetrical. The tail is reddish-orange and ringed with several dark bands. Body size and morphology varies considerably among subspecies of tigers with Amur tigers (also known as Siberian tigers) being the largest. Male Amur tigers can weigh around 490 lbs. while females can weigh around 260 lbs.

**Breeding:** Tigers live alone (solitary) except when a female is with her cubs. It takes about 103 days for cubs to be born and they give birth to 1-7 cubs. Average litter sizes are 2-3 young. Newborn cubs are blind and helpless. Their eyes open between 6 and 14 days after they are born and the ears between 9 and 11 days after they are born. The mother spends most of her time nursing the young during this vulnerable stage. Weaning occurs at 90-100 days old. Cubs start following their mother at about 2 months old and begin to take some solid food at that time. From 5-6 months old, the cubs begin to take part in hunting expeditions. Cubs stay with their mother until they are 18 months to 3 years old. Young tigers do not reach adulthood until around 3-4 years old for females and 4-5 years old for males.

**Behavior/Adaptations:** Tigers are most active at night (nocturnal), when their wild hoofed prey is most active, although they can be active at any time of the day. Tigers prefer to hunt in dense vegetation and along routes where they can move quietly. Tigers have tremendous leaping ability, being able to jump from 8-10 meters. Tigers are excellent swimmers and water doesn't usually act as a barrier to their movement. Tigers are also excellent climbers, using their retractable claws and powerful legs. Communication among tigers is maintained by scent markings, visual signals, and vocalization.

Visual signals made by tigers include spots that have been sprayed, scrapes made by raking the ground, and claw marks left on trees or other objects. Tigers can also communicate vocally with roars, growls, snarls, grunts, mews, and hisses. Each sound has its own purpose, and appears to reflect the tiger's intent or mood. For example, a tiger's roar is usually a signal of dominance; it tells other individuals how big it is and its location. A moan communicates submission.

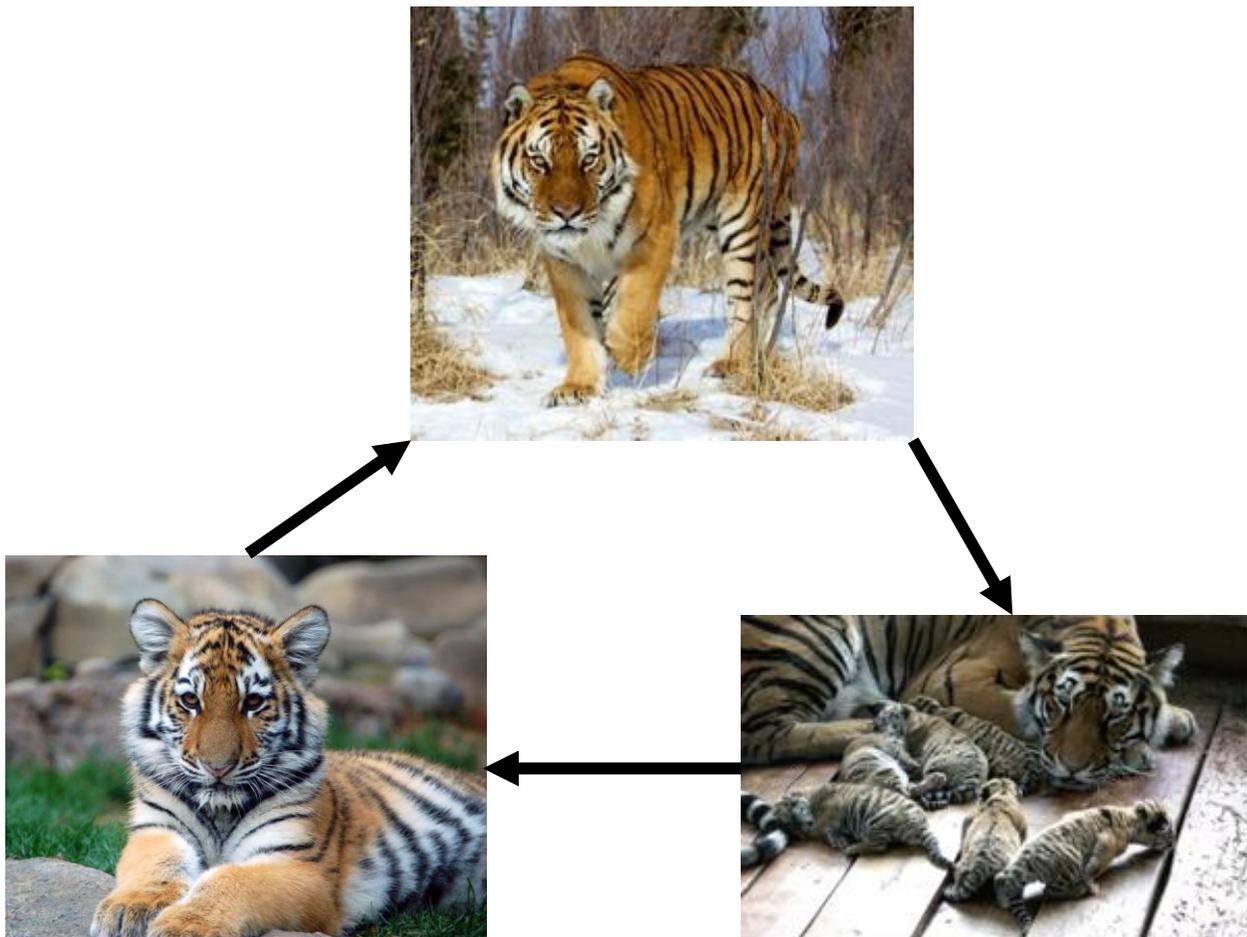
**Predators:** Humans

**Conservation:** Amur tigers are endangered and it is estimated that only 400-500 individuals are left in the wild.

**Interesting Facts:**

- Tigers are the only large wild cats with stripes.
- The stripe patterns of a tiger are not symmetrical from one side of the animal to the other.
- Tigers make a sound called a "chuff." The "chuff" is conserved to be a friendly and non-threatening alternative to purring.

## Amur Tiger Life Cycle





# Walking Stick

*Baculum extradentatum*

## Insect

**Range:** Vietnam and surrounding areas of Southeast Asia

**Habitat:** Tropical forest

**Diet:** Herbivores, walking sticks eat leaves from trees and shrubs

**Life span:** 8 months-1 year

**Description:** This species of walking stick is 4-5 inches long. Brownish in color, with six legs, these insects are almost completely camouflaged when they sit still on trees and foliage. They have small antennae that project from their oval shaped heads, and very long, spindly legs to give them more of a stick-like appearance. Walking sticks also have small hooks on the end of each leg to aide in climbing up vertical surfaces.

**Breeding:** Females can lay hundreds of small eggs that hatch in 3-4 months. It takes another 4 months for the nymphs to become adults. While still young, nymphs have the ability to re-grow legs that may be lost due to attacks from predators. Once they reach adulthood, the walking sticks will survive roughly another 4 months before the end of their life cycle.

**Behavior/Adaptations:** In addition to limb regeneration, and camouflage, the walking stick may sit completely motionless for hours to blend in as much as possible. They can also be seen rocking back and forth to imitate a stick in the wind.

**Predators:** Birds and small mammals

**Conservation:** Non-threatened. This species of walking stick is plentiful in its natural range and also prevalent in captivity.

### Interesting Facts:

There are over 2000 known species of walking sticks!

The Vietnamese walking stick is also known as the devil horn walking stick because of the small antennae visible on its head.

# Walking Stick Life Cycle

