Sea turtles

Sea turtles like these green turtles are found throughout the tropical and warmer temperate waters of the world's oceans.

Green turtles lay their eggs in hollows on the sandy beaches of favored nesting sites like Ascension Island - these turtles may migrate nearly three thousand miles from the coasts of South America to nest, although other sea turtles lay their eggs much closer to home.

Although slow and ungainly on land, sea turtles are graceful swimmers, and seem to fly through the water, using their flippers as giant wings to soar through the ocean.

Pond and river tortoises

Aquatic tortoises like these American sliders inhabit many of the world's tropical and warm temperate lakes and rivers, from the Americas across to southeastern Asia. Most members of this family are fairly small and eat a varied diet including insects, mollusks and plants.

Sometimes the feeding behavior of these reptiles changes as they get older: for example younger sliders eat insects, while the older animals eat mainly plants.

Tortoises

Everyone is familiar with the lumbering tortoise, in the form of the smaller species often kept as pets. Thankfully, protection of these animals in the wild has slowed the sale of the animals to pet stores, and breeding programs in many zoos has helped build up populations again.

These giant tortoises from the Galapagos islands in the Pacific Ocean are truly enormous, rivaling the Aldabran giant tortoises in size. Tortoises are very long lived - specimens have been known to live over 150 years.

Side necked turtles

The matamata is one the strangest looking turtles with its irregular shell and long neck with loose flaps of skin.

This turtle is active at twilight and after dark, feeding on fish and other small aquatic animals. Its shell gives perfect camouflage as the matamata lurks on the bottom of ponds or rivers.

Snapping turtles

The snapping turtle of North and central America spends most of its life on the bottom of ponds where it hides in the mud waiting for its prey. Snapping turtles eat aquatic worms and insects and may also eat diseased or wounded fish, frogs or birds.

These turtles have huge heads with powerful jaws. They have webbed feet with sharp claws.

Snapping turtles also have long bony ridged tails. They lay their eggs on land, often some distance from water and breed throughout the summer months.

The variety of lizards

Lizards are very widespread reptiles found from the Arctic circle to the far south of New Zealand. Most species have four legs and may be capable of rapid locomotion, moving by undulating their bodies in a characteristic fashion.

Lizards show various modifications to particular lifestyles. Some, like the geckos have modified feet which helps them adhere to vertical surfaces. Others like chameleons are laterally compressed to allow more stable movement along narrow branches.

Although lizards often look fearsome, the only poisonous species are the beaded lizards like this Gila monster from the southwestern USA.

The largest species is the Komodo dragon from southeast Asia, capable of bringing down a full size deer or wild pig.

Agamid lizards
The chisel-teethed lizards include the inland bearded dragon found in Australia The bearded dragon shows many of the typical features of this group of lizards, including neck folds and frills and rows of spines along each side of the body.

Spiny tailed lizards like this Uromastyx species are also agamid lizards and live in Northern Africa.

Beaded lizards
The Gila monster and its Mexican cousin the beaded lizard are the only poisonous lizard species. Found in the deserts of the southwestern USA and Mexico, these lizards have scales in the form of tiny beads along their upper bodies. Because its venom is not very potent, the Gila monster has to chew its victim to wash the poison into the wound - the venom acts on the nervous system and muscles to cause internal bleeding and paralysis.

Chameleons
Chameleons have long prehensile tails, feet adapted for gripping to twigs and branches, and a laterally compressed body which helps the animal's stability while it is climbing. Lateral compression also enables the chameleon to present a larger surface area to the sun's rays while it is basking.

These lizards also have eyes in turret-like swivels - these eyes can move independently and probably help the animals accuracy when it shoots out its famous long tongue to capture food.

There are some 150 species of chameleon. They all live in the Old World, from southern Europe across Africa and Madagascar to India. Some species have horns, and most chameleons are capable of displaying ranges of color depending on their mood and temperature.

Girdle-tailed lizards
The sungazer of southern Africa has a triangular flattened head with large spiny scales. It lives on dry rocky ground and grasslands. This lizard gets its name from its habit of standing motionless while it exposes its body to the sun's rays in the morning, with its head pointing upwards. When the sungazer reaches its optimum temperature it becomes active and hunts for insects and spiders.

Sungazers live in colonies in underground burrows, although each burrow is usually occupied by a single sungazer.

Iguanas
The Iguanidae are a varied family of lizards found mainly in north and south america, and include iguanas, basilisks, anoles and the horned lizards. Iguanas like this adult green iguana often have throat fans and crests on their backs - the desert iguana of the southwestern USA is much less ornate.

This zebratailed lizard is also found in the southwestern USA - it eats insects, spiders and smaller lizards and curls its tail over its back when disturbed.

This banded iguana is a small iguana found in tropical rainforests -

The related anoles are south american lizards also found in trees. They have flatter skulls than iguanas, and have long toes adapted for gripping branches.

Monitors

Monitors are large lizards living in Africa, southeastern Asia and Australasia. They include this African savannah monitor.

Notice how this monitor continually flicks out its very long tongue. Monitors use their tongues to search out food - although this monitor is moving slowly in the midday sun, members of the monitor family are capable of running fast and some monitors can even outpace humans over a short distance.

Skinks

Skinks like this Giant Solomon Island skink are recognisable by their triangular-shaped head. Skinks are found in various habitats - from deserts to forests, although many have very small limbs and spend much of their lives underground.

Most skinks eat insects, although some also eat seeds.

The Giant Solomon Island skink can grow to around 2 feet in length - this species can climb well and has a reputation for being bad tempered.

Living without limbs

Snakes are a highly successful group of reptiles found throughout much of the world, although the greatest number are found in desert, warm temperate and tropical regions.

This woma is an Australian member of the python family - it eats other snakes. Pythons are so-called primitive snakes which retain two lungs and vistiges of hind limbs which relate them to lizards. Primitive snakes usually kill by constriction.

The mountain adder shown here is an advanced snake belonging to the same family as the rattlesnakes and vipers. These venomous snakes are called advanced snakes because they only have one functional lung and most have no vestigial limbs. Advanced snakes often have lighter bodies because they do not have to have strong bodies to kill by constriction - instead they are often venomous.

Cobras and mambas

This green mamba is an egg-laying venomous snake from Africa. It lives in trees. Although green mambas can reach 5 feet long they are smaller and less aggressive than the 12 foot long black mamba.

Pythons

Pythons are a group of egg-laying snakes which kill by constricting their prey. They include this green tree python of tropical Africa - notice that this snake doesn't blink - snake don't have eyelids at all!

The woma is an Australian python that preys on other snakes. This woma is burrowing in sand.

Rattlesnakes

Rattlesnakes are pit vipers found in the deserts of the USA and Mexico, although some species have been seen as far south as Argentina. The horny segments on the rattlesnakes tail vibrate when the animal is disturbed, and as the venom of a diamondback rattler can kill a full grown man within an hour, the warning is well justified.

Horned vipers come from north Africa and southwestern Asia. Closely related to the American rattlesnakes, horned vipers eat lizards and small rodents, and bury themselves in sand when alarmed.

Crocodilians

There are around twenty species of crocodilians, divided into the crocodiles, alligators and the gharial.They all live in water and have broad tails to help them swim. The three families of crocodilians can be recognised by their snouts.

Alligators have flattened, wide heads. The lower teeth of alligators fit inside the upper teeth, so that the upper teeth are the only ones visible when the mouth is closed.

Crocodiles have more triangular shaped heads: both upper and lower teeth can be seen when the mouth of these animals is closed.

The gharial has a strange elongated snout, streamlined to help this animal move its head quickly underwater to catch fish.

Alligators
This male alligator is being fed a meal of fresh fish. Although alligators look as though they need a lot of food, this isn't really true. Like all reptiles, alligators are cold blooded and need to eat much less food than warm-blooded birds and mammals. In fact, this particular alligator doesn't eat at all during the winter months, and a large meal like a pig or deer would last an alligator in the wild for a period of weeks.

Gharials
Gharials live in the rivers and swampy estuaries of north and east India, as well as in Bangladesh and Nepal. They eat fish and seldom attack humans.

Gharials are fond of basking on riverbanks and can often be seen on sandbars in the middle or rivers.

Tuatara
The Tuatara is found only in this group of rocky islands off the coast of New Zealand.
These islands are rocky and desolate and difficult to land on - they form an ideal retreat for the remnant of a group of reptiles that once lived in many regions of the world.
Adult tuataras are about two to two and a half feet long. This male tuatara shows a characteristic spiny crest on the animals back - the crest is raised when the male is alarmed. The name tuatara means 'spine bearer' in the language of the native New Zealanders or Maoris
Female tuataras have less pronounced crests
Tuataras are usually active at night, spending their days in burrows made by seabirds like petrels and shearwaters. They mate in January, each year, and their eggs take 15 months to develop - longer than any other reptile.
The young tuataras measure only two inches long when born, and are very active from the time of hatching.
Growth of the young tuataras takes a long time. Tuataras are not sexually mature until they are 20 years old, and these strange reptiles are thought to live as long as a hundred and twenty years.