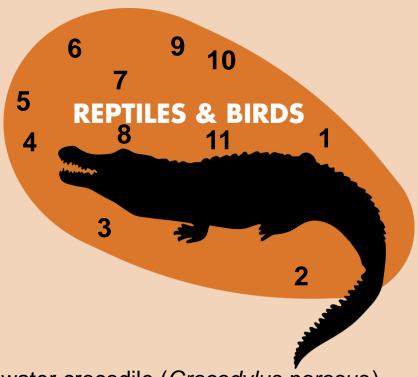


SCULPTURE LEARNING PLAZA





- 1 Salt water crocodile (*Crocodylus porosus*)
- 2 Leatherback sea turtle (Dermochelys coriacea)
- **3** Galapagos marine iguana (*Amblyrhynchus cristatus*)
- 4 Rattlesnake (Genus *Crotalus*)
- 5 Panther chameleon (Furcifer pardalis)
- 6 California condor (Gymnogyps californianus)
- 7 Kiwi (Genus Apteryx)
- **8** Hoatzin (*Opisthocomus hoazin*)
- **9** Tuatara (Genus Sphenodon)
- **10** Burmese python (*Python bivittatus*)
- **11** Horned puffin (*Fratercula corniculata*)

All sculptures in this section are true to size.



Salt water crocodile Crocodylus porosus

Habitat/diet: Mangrove swamps, coastal marshes, river mouths, and occasionally open ocean. Saltwater crocs lurk just below the water's surface, springing out to eat any animal that comes down to drink, including water buffalo, birds, monkeys, and wild boar, and have also been observed feeding on sharks and other fish.

Status: Least Concern – IUCN 1996 (Previously categorized as endangered – IUCN 1988)

Range: Brackish and freshwater regions of Eastern India, Southeast Asia, and Northern Australia.

Fascinating facts:

- The saltwater crocodile is the largest living reptile, with an average size of 17 ft and 1,000 lbs, and a measured maximum of 23 ft and 2,200 lbs!
- Saltwater crocs can live to be 70 years old in the wild.
- "Salties" (as Australians call them) are excellent swimmers and can easily cross large bodies of water.
- In the 1940's-1970's extensive hunting sent this species to the brink of extinction, but protection, hunting restrictions, and breeding programs have brought them back!

Can you find?...

- Another sculpture with webbed feet?
- Another sculpture that eats meat?





Sculpture Photo by Blair Bazdarich



Leatherback sea turtle Dermochelys coriacea

Habitat/diet: They are mostly pelagic (open ocean) animals, and they follow the populations of their prey around the globe. Their throats are covered in backwards-facing spines that aid them in catching softbodied, gelatinous pelagic animals like jellyfish.

Status: Vulnerable – IUCN 2013

Range: Leatherbacks have the widest global distribution of all reptiles, and can be found in tropic and temperate waters of the Atlantic, Pacific, and Indian Oceans. Once adults, they travel as far north as Canada and Norway and as far south as New Zealand and Argentina.

Fascinating facts:

- They are the largest turtle, reaching 7 ft long and up to 1,500 lbs!
- Leatherbacks can dive to depths of 4,200 ft and can hold their breath for up to 85 minutes.
- They are the only turtle with a soft, flexible carapace.
- At sexual maturity, females return to the land where they dig a hole in the sand and deposit their 80-100 eggs.
- Males spend their entire life at sea.
- Greatest threats include marine debris ingestion (plastic bags look like jellyfish), and unsustainable fishing methods (gill netting, etc).

- Another swimming reptile?
- Another animal that lays eggs?









Galapagos marine iguana Amblyrhynchus cristatus

Habitat/diet: Marine iguanas live on rocky coast and intertidal zones. Females nest up to 2 km inland and adult males can be found in marine waters, up to depths of 20 m. They are herbivores, and feed exclusively on underwater vegetation, such as algae and seaweed.

Status: Vulnerable – IUCN 2004

Range: Galápagos Islands of Baltra, Daphne, Darwin, Marchena, Pinzon, Rabida, Santa Fe, Seymor, Sin Nombre and Wolf, as well as southeast Pacific ocean waters.

Fascinating facts:

- They are the world's only marine lizard species.
- Threats to marine iguana populations include El Nino events, oil spills, introduced predators, and sea level rise from climate change.
- Due to their salty diet, they have salt expelling glands on their nose that create a white "wig" of salt over time.
- While clumsy on land, their long flat tail and strong claws help them to propel through the water and hold on to rocks when eating.
- Their dark skin helps them absorb heat from the sun after foraging in cold ocean waters.

- Another animal that eats only plants?
- Another great swimmer?









Rattlesnake Genera *Crotalus*

Habitat/diet: Most species live in open, rocky habitats, but some others can be found in prairies, deserts, marshes, or forests. They depend on a warm habitat with basking sites, plentiful with prey items like lizards, birds, and rodents.

Status: Most species are Least Concern – IUCN 2007; Santa Catalina Island Rattlesnake is Critically Endangered – IUCN 2007

Range: The Americas, from southwest Canada to central Argentina. The majority of species are found in the American Southwest and Mexico.

Fascinating facts:

- Rattlesnakes have heat sensing pits on their face to find warmblooded animals.
- Adults shed their fangs every 6-10 weeks.
- Venom glands give them the "spade shaped" head that characterizes most venomous snakes.
- Their venom contains elements to immobilize and disable prey, as well as digestive enzymes to start breaking down tissues.
- The rattle contains modified hollow scales, and when shaken create a warning sign for predators to stay away.

- Another animal without arms or legs?
- Another animal that can be found in North America?







Panther chameleon Furcifer pardalis

Habitat/diet: Scrub and forest areas, both natural and disturbed. Chameleons prefer to be up in trees or shrubs off the ground, and need high humidity. They have a very long, fast tongue, which they use to catch insects. They will also eat small birds, other reptiles, and amphibians.

Status: Least Concern – IUCN 2011

Range: Warm lowland or coastal habitats in northern Madagascar.

Fascinating facts:

- Male panther chameleons have intense patterns that vary depending on the area they are from.
- Females are usually more dull, resembling their habitat, but can communicate via color changes.
- Chameleon eyes move independently but focus together on prey to provide stereoscopic vision with depth perception.
- Chameleon feet are zygodactyl (like parrots) with two toes pointing forward and two pointing back, making them great climbers!
- Their tongue can stretch to 1.5 2 times the length of their body!

- Another animal with a curly tail?
- Another animal that lives in trees?
- Another animal from Madagascar?









California condor Gymnogyps californianus

Habitat/diet: Condors once inhabited coasts and plains, but now live mostly in mountains due to human disturbance. They ride air currents up to 15,000 ft, and feed on carrion (deceased prey items). They usually eat large mammals like cow, deer, elk, and horses, and will gorge themselves when possible, unable to fly for hours afterwards.

Status: Critically Endangered – IUCN 2014

Range: Once found all along the west coast of North America, they are now limited to reintroduction sites in California, Arizona, and Baja California.



Fascinating facts:

- The California condor is the largest flying bird in North America, with a wingspan of up to 10 ft, weighing 18-25 lbs!
- Known as "thunderbirds" to many Native Americans, condors are sacred and thought to bring thunder with beats of their large wings.
- Only 27 individuals remained in 1987 (the last birds were placed in a breeding program).
- There are over 400 as of 2014, with 219 condors thriving in the wild.
- By riding air currents, condors can fly for hours without flapping their wings.

- A bird with wings so small they're hidden by feathers?
- Another flying animal that isn't a bird?









Kiwi Genus *Apteryx*

Habitat/diet: Kiwis are forest dwellers, and live in a series of burrows under dense vegetation or in hollow logs, often dug with their powerful feet. They use their highly developed sense of smell to hunt insects, worms, grubs, and amphibians underground, and supplement their diet with seeds and fruit.

Status: Near Threatened, Vulnerable, or Endangered, depending on species – IUCN 2012, 2013, 2014

Range: Steep, wet forested areas of New Zealand, exact distribution dependent on species.

Fascinating facts:

- Predation by introduced animals and loss of habitat affect populations in the wild, severity dependent on the species.
- Kiwis' wings are so small (about 1 inch long) they are considered vestigial, and are not visible through their hair-like feathers.
- The kiwi is the national animal and symbol of New Zealand.
- They lay the largest egg of any bird compared to body size.
- Kiwis are the only bird with nostrils at the end of their beak.
- They have very strong, muscular legs, which make up about a third of their total body weight and are used for running and fighting.

- Another animal that eats bugs?
- Another animal with a great sense of smell?









Hoatzin Opisthocomus hoazin

Habitat/diet: Swamps, forests, and freshwater mangroves. They exclusively eat swamp plants (leaves, roots, and flowers), enabled by their enlarged crop which ferments their food before entering the gut. They are also called "stinkbirds" because this process creates an unpleasant odor similar to cow manure.

Status: Least Concern – IUCN 2012

Range: South America, mostly in the Amazon and Orinoco river basins.

Fascinating facts:

- Chicks have large claws on each wing, leading some scientists to link the species with the fossil Archaeopteryx.
- Chicks can also swim; they will drop into rivers to escape predators.
- They are the only bird with a digestive system that ferments vegetation similar to a cow.
- They have a callused skin patch on their sternum where they rest their swollen gut (from the fermenting plant material).
- Hoatzins live in groups of 15-100 birds.

- Another animal that hangs out in trees?
- Another animal from South America?
- Another animal that lives in a group?











Tuatara Genus *Sphenodon*

Habitat/diet: Tuataras find burrows created by other animals, and will often share them. They eat insects, lizards, birds, and eggs. Young tuataras will hunt during the day to avoid being eaten by adults, who hunt at night.

Status: Cook Straight Tuatara: Least Concern – IUCN 1996;

Brother's Island Tuatara: Vulnerable – IUCN 1994

Range: Once throughout mainland New Zealand, they are now only found on 32 offshore islands.

Fascinating facts:

- Tuataras are the only living member of their order they are called "living fossils" because the rest went extinct 60 million years ago!
- An introduced population of rats are considered to be the greatest threat to tuataras.
- They have two rows of teeth on the top, and one on the bottom.
- "Tuatara" is a native Maori word meaning "spiny back."
- Tuataras have a "third eye" on the top of the head covered by scales with a retina, lens, and nerve endings that is sensitive to light.
- Unlike lizards, tuataras have: nocturnal habits, a preference for cool weather, and lack external ears.

- Another animal with scales?
- Another animal with spikes or spines?







Burmese python (with eggs) Python bivittatus

Habitat/diet: Most commonly found in mangrove forests and rainforests, but occasionally also in grasslands, marshes, streams and rivers. Good climbers and expert swimmers, they are non-venomous constrictors that feed on mammals, birds, reptiles and amphibians.

Status: Vulnerable – IUCN 2012

Range: Southeast Asia and India

Fascinating facts:

- Females shiver/twitch their muscles to keep their clutch of up to 100 eggs warm during incubation (2-3 months).
- They can hold their breath for up to 30 minutes when swimming.
- This species is threatened by illegal trade as pets and for their skin.
- Former pets were released into the Everglades in the Southern US and the growing population is now a major threat to local species.
- Pythons lack fangs; they have a row of backwards-facing teeth that prevent prey from escaping their jaws.

- Another carnivore?
- Another animal that can climb trees?
- Another animal with a pattern on their skin?









Horned puffin (with fish) Fratercula corniculata

Habitat/diet: Nests on islands and coastlines of Alaska on cliffs and in crevices, spends most of the year on the seas of the northern Pacific. Puffins eat fish and marine invertebrates, and can dive up to 80 feet to catch their prey, using their wings to swim.

Status: Least Concern - IUCN 2012

Range: Nest in Alaska and British Columbia, and spend the rest of their lives at sea in the northern Pacific, near Alaska and Japan down to Washington. They are occasionally spotted as far south as southern CA.

Fascinating facts:

- Parents work together to care for their chicks for 40 days.
- After the parents leave, chicks fly out to sea for 2 years.
- Puffins have special beaks with backwards facing spines and raspy tongues for carrying multiple fish at once.
- They hold around 10 fish per catch; the most ever observed was 65!
- Their strong legs at the back of their body make them great swimmers but clumsy on land.
- They have white and black faces with colorful beaks in breeding season, and mostly grey faces with duller beaks in winter.

- Another animal that eats fish?
- Another pelagic animal (lives at sea)?





