

The Field Museum Education Department Presents



# MYTHIC CREATURES

*Dragons, Unicorns & Mermaids*

## Educator Guide & Walking Map

The Field Museum's Education Department develops on-line Educator Guides to provide detailed information on field trip planning, alignment with Illinois State Standards (ILS), as well as hands-on classroom activities to do before and after your visit to the Museum.

*Mythic Creatures: Dragons, Unicorns & Mermaids* is organized by the American Museum of Natural History, New York, in collaboration with The Field Museum, Chicago; Canadian Museum of Civilization, Gatineau; Australian National Maritime Museum, Sydney; and Fernbank Museum of Natural History, Atlanta.

The **Field**  
Museum

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## ***Mythic Creatures: Dragons, Unicorns & Mermaids***

March 19 through September 1, 2008

*Mythic Creatures: Dragons, Unicorns & Mermaids* uses paintings, life-size models, and cultural objects from around the world to shed light on the ways people have been inspired by nature to depict strange and wonderful creatures. From Pliny the Elder who, in 77 C.E., asserted that mermaids were “no fabulous tale,” to today’s sightings of Scotland’s famous yet unsubstantiated Loch Ness Monster, mythic creatures delight and mystify us all.

*Mythic Creatures* features fossils of prehistoric animals and preserved specimens to investigate and illustrate how they could have—through imagination, speculation and even fear—inspired the development of some legendary creatures. For instance, Scythian nomads of southeastern Europe may have mistaken dinosaur fossils for the remains of griffins and narwhal tusks from the North Sea likely offered credibility to the belief in the unicorn.

Throughout the exhibition, models of mythical creatures astound and delight. Come face-to-face with a 17-foot-long dragon with a wingspan of over 19 feet; a 10-foot-long unicorn; an 11-foot-long Roc with a wingspan of nearly 20 feet and huge talons sweeping overhead; and a kraken, whose 12-foot-long tentacles appear to rise out of the floor as if surfacing from the sea. The exhibition also includes two life-sized models of real creatures: an over-six-foot tall extinct primate called Gigantopithecus; and the largest bird ever to have lived, the over-nine-foot tall, extinct Aepyornis.

Other highlights include: a “Feejee mermaid,” similar to those made famous by P.T. Barnum, created by sewing the head and torso of a monkey to the tail of a fish; a 120-foot-long Chinese parade dragon, recently used in New York City’s Chinatown at a Lunar New Year performance; and a Pegasus carousel sculpture.

Before you visit the exhibition, spend some time viewing the information on the Web site to begin planning your field trip. We also recommend our quick fun facts and pre-activities to introduce your students to the complexities of the exhibition, and to focus on one or two sections within the exhibition to study in depth. Each section has an introduction overview, guiding questions and answers, suggested pre-activities, field trip activities, and post-visit activities to help guide your students’ experiences.

### **This Educator Guide is organized in five parts:**

- Key Concepts, Illinois Learning Standards (ILS), and Words-to-Know
- Exhibition Guide
- Teacher and Student Bibliography and Other Resources
- Fun Facts
- A Walking Map

Pre-registration is required for all Field Museum field trips. Register on-line at [www.fieldmuseum.org/fieldtrips](http://www.fieldmuseum.org/fieldtrips) or call 312.665.7500 for more information.

Visit us on-line at [www.fieldmuseum.org/mythiccreatures](http://www.fieldmuseum.org/mythiccreatures)

Guide Contributions

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Adapted by The Field Museum’s Education Department

You can connect *Mythic Creatures: Dragons, Unicorns & Mermaids* to your curriculum using these key concepts that convey the main educational themes of the exhibition.

- **Mythic creatures are dragons, unicorns, mermaids...and bunyips, rocs, cyclopes, and more.** Mythic creatures are fantastic beings—some familiar, others unusual—that take shape through human creativity. They enchant, terrify, and amuse. Their forms and meanings are as diverse as their cultural origins. Ultimately, mythic creatures serve as symbols of the human experience. The continued persistence of the often very ancient stories about these beings endure today is a testament to their powerful imagery and broad appeal in cultures around the world.
- **Mythic creatures teach us about cultures around the world.** Stories about mythic creatures embody belief systems, identity, moral codes, impressions of the natural world, and other aspects of humanity. As cultures change over time, the qualities of their mythic creatures can change, too. Therefore, we can study these creatures to learn about the history and adaptations of cultures both past and present.
- **Many mythic creatures reflect attempts to describe the natural world.** Mythic creatures can offer perspective on how scientific discovery changes over time. Before formal scientific methods came about, a fleeting glimpse of an animal or finding of unfamiliar bones was often enough to confirm a being's existence. Indeed, many mythic creatures are bizarre assemblages of parts of real animals. As methods for scientific observation and interpretation evolved, it became clearer which animals exist in nature—and which are mythical.
- **Mythic creatures are a medium of cultural interaction.** When people from different cultures interact, they often blend and borrow myths, stories, and images. This cultural exchange can explain why numerous cultures have mythic creatures that appear similar. Some even retain similar meanings.
- **Mythic creatures take shape through human imagination.** Mythic creatures are evidence of the uniquely human capacity for symbolic expression: the ability to express abstract thoughts about our world using symbols in language, art, and music.
- **Cultures keep mythic creatures alive through art and literature.** The narratives of mythic creatures frequently appear in literature, oral traditions, music, dance, drama, celebrations, and many other art forms. These powerful stories continue to resonate with us and persist as artists reinterpret them over and over. Knowing more about mythic creatures can help us interpret their symbolic use in art and literature.

The Illinois Learning Standards (ILS) define what students in all Illinois public schools should know and be able to do in the seven core areas as a result of their elementary and secondary schooling. The classroom assessments are resources to help teachers determine local performance expectations for the ILS at each grade level. For more information on the ILS, visit [www.isbe.state.il.us/ils/Default](http://www.isbe.state.il.us/ils/Default).

Use of materials in this educator guide in combination with a field trip to the exhibition will help you link learning experiences to the following ILS. Teachers will need to identify descriptors and benchmarks to individual lesson plans, larger units of study, and to specific subject area. This exhibition, while suitable for all students regardless of grade level, maps closely to the concepts studied in later elementary and middle school.

## English Language Arts

- State Goal 1: Read with understanding and fluency.
- State Goal 2: Read and understand literature representative of various societies, eras and ideas.
- State Goal 3: Write to communicate for a variety of purposes.
- State Goal 4: Listen and speak effectively in a variety of situations.
- State Goal 5: Use language arts to acquire, assess and communicate information.

## Science

- State Goal 11: Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
- State Goal 13: Understand the relationships among, science, technology and society in historical and contemporary contexts.

## Social Science

- State Goal 16: History
- State Goal 18: Social systems

## Fine Arts

- State Goal 25: Know language of the arts.
- State Goal 26: Create and perform.
- State Goal 27: Understand the role of the arts in civilizations, past and present.

Also see Encyclopedia Mythica ([www.pantheon.org](http://www.pantheon.org)) for further mythical definitions.

**Culture:** The learned patterns of thought and behavior characteristic of a group or society. The main components of a culture include its economic, social, and belief systems.

**Evidence:** Observations or other materials that support ideas, concepts, or scientific hypotheses.

**Hoax:** Something intended to deceive; fraud.

**Identity:** The qualities and characteristics a person or group uses to describe themselves.

**Imagination:** The ability to form images and ideas in the mind, especially things never seen or experienced directly.

**Interpret:** To translate or explain.

**Legend:** An unverifiable story handed down by tradition and popularly accepted as having some basis in history.

**Mythic:** Having supernatural or extraordinary qualities; often associated with traditional or legendary stories.

**Pegasus:** In mythology, a winged horse, created from the blood of Medusa, that opened the spring of Hippocrene (the name of a fountain on Mount Helicon) with a stroke of its hoof, and that carried Bellerophon (a hero of Greek mythology) in his attack on the Chimera (a monster with the head of a lion, the body of a she-goat, and the tail of a dragon).

**Representation:** The visible form of an idea or concept.

**Ritual:** Any practice or pattern of behavior repeated in a prescribed manner including but not restricted to religious rites.

**Stylize:** To give something a distinctive artistic or cultural style.

**Symbol:** A material object representing something visible or invisible; a characteristic mark used to represent something.

**Traits:** Distinguishing characteristics or qualities.

**Unicorn:** A mythical creature resembling a horse, with a single horn in the center of its forehead.

**Witness:** To be present at an occurrence; a spectator or bystander.

**W**elcome to *Mythic Creatures*! The world is full of stories about brave heroes, magical events and fantastic beings. For thousands of years, humans everywhere have brought mythic creatures to life in stories, songs and works of art. Today, these creatures, from the powerful dragon to the soaring phoenix, continue to thrill, terrify, entertain, and inspire us.

We seem to catch glimpses of these creatures all around us: hiding beneath the ocean waves, running silently through the forest and soaring among the clouds. Some symbolize danger and others are thought to bring us luck or joy. Together, mythic creatures give shape to humankind's greatest hopes, fears, and most passionate dreams.

Through the exploration of diverse cultural perspectives present in legends, art, anthropology, and literature, the *Mythic Creatures* exhibition presents fantastical creatures that have been a part of human experience for thousands of years and continue to fascinate us.



## **Dragon model**

This 17-foot-long dragon with a wingspan of over 19 feet guards the entrance to *Mythic Creatures: Dragons, Unicorns & Mermaids*.

© D. Finnin/AMNH

# Section One: Mythic Creatures Water Realm

## Creatures of the Deep

**W**ater beckons us. It's soothing, seductive...but it's also capable of unleashing deadly force. The mythic creatures that inhabit the depths give form to water's essential mysteries. They arouse feelings of curiosity, hope—and bottomless fear. Like water itself, these creatures can be beautiful and enticing. But will they share their life-giving bounty? Or lure us to destruction?

In this gallery, students will be able to examine a model of a Kraken. They can also try their hands at two interactive elements, one highlighting the similarities between mermaids and manatees, and the other among whales, dolphins, and sea serpents. Ask students, how might early sailors have interpreted manatees as mermaids and whales and dolphins as sea serpents? The *Dragon Pavilion* in this section also provides a unique opportunity to explore Chinese shadow puppets.



### **Kraken model**

This Kraken, a mythical sea monster, has 12-foot-long tentacles that appear to rise out of the floor in the special exhibition *Mythic Creatures: Dragons, Unicorns & Mermaids* as if surfacing from the sea.

© D. Finnin/AMNH

## Creatures of the Deep *(continued)*

### Guiding Questions

1. Sailors and people who spend a lot of time fishing cannot help but wonder what lurks in the depths. In the past when the oceans were still unexplored, these fears often produced stories about imaginary monsters. How did these tales originate?
2. Many people around the world have stories about water creatures that are half-fish and half-human. The specific creatures are often unique to different cultures, but frequently also have certain details in common. How did these similarities originate?
3. What happened to some of the myths of Indigenous peoples when Europeans arrived in different countries?
4. How do mythic creatures fare in the contemporary world we live in today?

### Answers to Guiding Questions

1. Well-known myths about sea monsters were often a result of tales told by sailors. These tales were frequently the only first-hand information available to most people about the inhabitants of the ocean. These stories ranged from accurate observations to honest misinterpretations to outright tall tales, with no way for even the most objective naturalist to separate fact from fiction.
2. Although each culture has its own version of water creatures, similarities exist because the myths are often a combination of cultural traditions and beliefs and myths from travelers from other cultures. For example, mermaids common to Europe, Africa, and the Americas all carry combs and mirrors because these details were passed from Europe to Africa to the Americas as early travelers spread mermaid stories and art around the world.
3. When European settlers arrived in different countries, they brought their own stories – and learned new ones from the peoples already there. The beliefs of Indigenous peoples were often modified because of contact with new cultures. Many important Indigenous stories and traditions survived, while others were blended with new ideas.
4. When older stories enter the contemporary world that we live in, they are often modified. Many once-frightening legends have been altered to make them into themes for consumer products for children, reflecting the modern views of childhood. Creatures that were once scary may become cute and cuddly, like the Japanese kappa (as seen in the exhibition). For example, modern society alters or softens the kappa's original meaning, depicting it as a cute and friendly—and far more fitting for children's toys, movies, and books.

# Section One: Mythic Creatures Water Realm

## Creatures of the Deep *(continued)*

### Pre Activities

1. Show students how difficult it can be to describe an animal based on one fleeting observation. Walk around the class with a photo of an unusual animal so each student observes it for just a few seconds. Take the image away, and have students describe the animal in as much detail as possible. Compare student recollections of the picture.
2. Show students pictures of mermaids taken from a variety of sources (movies, books, art). Discuss the similarities and differences in the way the mermaids are depicted and why these differences may exist.
3. Print out copies of the National Geographic “Sea Creature Trading Cards” found at [www.nationalgeographic.com/xpeditions/guides/smtradingcards.pdf](http://www.nationalgeographic.com/xpeditions/guides/smtradingcards.pdf). Ask students to make inferences about the creatures based on what they look like. Next, ask students to write their own myths about one of the creatures, based on these initial inferences about them. To find out more information about sea creatures, visit <http://animals.nationalgeographic.com/seamonsters>.



### **Sedna green stone carving**

This large Sedna—a character in one of the most dramatic tales of the Inuit people of the Arctic regions of Canada and Greenland—with her long braids flowing above her head, was carved in 1991. Notably, Sedna has webbed fingers in this carving. In the traditional telling of the story, Sedna’s human fingers were chopped off. Falling into the sea, her fingers became the seals, walruses, and whales.

© Courtesy Canadian Museum of Civilization IV-C-6001, bequest of Dr. Dorothy Stillwell, Ottawa

# Section One: Mythic Creatures Water Realm

## Creatures of the Deep *(continued)*

### Field Trip Activities

1. Ask students to focus on the display of 16th century books. Discuss with your students how the oceans were largely unexplored at the time these books were written. Based on the information in these early books, ask students what they think people thought about the sea and its inhabitants. How are these interpretations similar or different to contemporary ideas about sea inhabitants?
2. As a group, ask students compare the depictions of mermaids from Haiti, Africa, and Europe while also examining a map with these geographical locations in the gallery. Ask students to answer the following questions:
  - What features do these mermaids have in common?
  - What features are unique to each mermaid?
  - How did the mermaid myth travel around the globe?
3. Direct students to the display cases with information about the kappa, traditional representations and contemporary interpretations. Ask students to describe how the image of the kappa has changed through time, and sketch some of the contemporary Japanese examples of the kappa.



### Lasirén Vodou sequined flag

The mermaid Lasirén is a water spirit popular in the Caribbean Islands and parts of the Americas. In the Caribbean, Lasirén has become a part of the Vodou tradition. Followers appeal to her for help in times of need. Some say that she takes people to her underwater world and they return with new powers. The name Lasirén comes from the French word *sirène*, meaning “siren” or “mermaid,” after the bird-women of ancient Greek mythology who called out to sailors, luring them to smash their ships onto the rocks.

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# Section One: Mythic Creatures Water Realm

## Creatures of the Deep *(continued)*

### Post Activities

1. Discuss the Nasca killer whale seen in the exhibition. Ask students to write responses to the following questions:
  - How do we know what the Nasca whale stories mean if all the people who created them are no longer around?
  - What other mythic creatures were depicted on Nasca pottery? Ask students to sketch a few of the mythic creatures that they remember from the gallery, then slightly alter the physical characteristics of the creature to create a new creature of their own.
2. As a class, discuss the *Taming Monsters* section of the gallery. Prompt conversation to address how some characteristics of mythic creatures have been modified for our contemporary cultures. Ask the students to write responses to the following questions:
  - How are mythic creatures depicted today?
  - What do they tell you about the world we live in?
  - Ask students to come up with their own design for a contemporary mythic creature.
3. To explore how mythic creatures can change over time, ask students to line up and show an image of a mythic creature or an unusual animal to the first student in line. The student will then describe it to the next student (by whispering in their ear) and so on. The last in line will draw a photo of the mythic creature on the board. As a class, compare the drawing to the original image and discuss how it has changed and why those changes occurred.



**Lasirén Vodou sequined flag**

© D. Finnin/AMNH

# Section Two: Mythic Creatures Land Realm

## Creatures of the Earth

**W**e share the land with countless living animals. Some are familiar; others seem quite bizarre. Creatures from the lands of myth can be both recognizable and strange. Sometimes they appear to have body parts from ordinary animals combined in unusual ways. Other times they look just like other animals, but have extraordinary and magical powers.

A large unicorn model greets visitors at the entrance to this gallery. Another highlight is a depiction of St. George slaying a dragon. Direct students to the “Pit of Bones” interactive element, where they can investigate how beliefs in giants and griffins may have come about because of similarities with mammoth and protoceratops bones.



### **Gigantopithecus model**

Enormous apes are more than a myth. This reconstructed massive creature called the Gigantopithecus is an extinct primate—a very distant relative of humans that lived in southeast Asia for almost a million years, until perhaps as recently as 300,000 years ago.

© D. Finnin/AMNH

# Section Two: Mythic Creatures Land Realm

## Creatures of the Earth *(continued)*

### Guiding Questions

1. Griffin-like creatures appear in the stories of many cultures in North Africa, the Middle-East, and Europe. What are some of the different meanings of griffins in different cultures in these regions?
2. The ancient Greeks told stories of giants, describing them as flesh and blood creatures whose bones could be found coming out of the ground. How were early interpretations about these strange fossils used to fuel tales about giants?
3. How do perceptions about Western and Asian unicorns differ? How are they similar?

### Answers to Guiding Questions

1. Griffins do not always mean the same thing in all cultures. In some cases, the griffin became a symbol of greed. In others, it was majestic and noble, like eagles and lions. And often, as a creature with two parts, the griffin played two roles at the same time—good and evil, mortal and divine, aggressor and victim.
2. In Greece, the remains of large and surprisingly humanlike bones can be found. These bones are the remains of extinct relatives of modern day elephants. Greeks who encountered these unfamiliar bones believed the enormous fossils were the remains of humanlike giants. Any nonhuman traits of the bones were interpreted as simply grotesque anatomical features unique to giants.
3. Both the pearly white unicorn of Western lore and the benevolent one-horned Asian unicorn avoid contact with humans, preferring instead to remain unseen. They are so elusive that no one can catch them. Western unicorns are so magical that their horns are believed to counteract poisons. Asian unicorns are traditionally described as creatures of great power and wisdom. They are believed to have assisted the first man in the creation of the world.

### Chupacabra

Chupacabra means “goat sucker” in Spanish and according to reports, the creature acts much like a vampire, killing animals by sucking their blood. Though similar stories date back several decades, the first major wave of alleged sightings came from farmers in Puerto Rico in the late 1980s and early 1990s. The fanged creature can also be spotted on T-shirts, coffee mugs, and other souvenir items.

© D. Finnin/AMNH



# Section Two: Mythic Creatures Land Realm

## Creatures of the Earth *(continued)*

### Pre Activities

1. Show students pictures of large, human looking bones (mastodon bones) at the Paleontological Research Institute: [www.priweb.org/mastodon/gilbert\\_mastodon/gil\\_mast\\_main.html](http://www.priweb.org/mastodon/gilbert_mastodon/gil_mast_main.html). Ask students to think about the following questions and write out their responses:
  - What would your reaction be if you found these bones while walking to school?
  - What sort of creature might you think these bones belonged to and what would lead you to make this interpretation?
  - What other questions do you have?
2. Read students several stories that focus on giants, such as Pat Posner's (2002) *Fantastic Creatures from Greek Myths* (Peter Bedrick Publishers) or Joseph Nigg's (1999) *The Book of Fabulous Beasts* (Oxford University Press). Divide students into two groups, one group takes the position that giant creatures are real (but undiscovered), and the other group that they are imaginary. Based on their designated position, ask them to write a newspaper-style editorial response in support of their position.
3. Ask students to share any myths that they have heard. Ask students to work in small groups to create illustrations of the myths shared with the class. Once illustrations have been created, ask each group to present their drawings to the class while re-telling the myth.

### Field Trip Activities

1. Ask students to observe the dwarf elephant skull in the gallery and ask them to imagine stumbling upon it, eroding out of a hillside. Ask students to:
  - Provide specific points as to why they think ancient Greeks may have interpreted the elephant skull as a Cyclops?
  - Examine the skull from a scientist's perspective. What are the specific features that indicate the skull was that of a small elephant?
  - Ask students to estimate the size, weight, length, and volume.
2. The Barong Ket comes to life in costumed performances that involve whole communities. Ask students to study the costume and contents of the Barong display in the gallery. Have a discussion with the students asking:
  - What aspects of human life are portrayed during the Barong's performances? How do the performances help the community?
  - What modern day animal(s) do you think the Barong resembles? What does the costume suggest about the Barong?
  - What other costumes or performances you think of to compare?
3. Around the world, people share stories about mysterious beasts that dwell on the land. Using a map of the world from National Geographic [www.nationalgeographic.com/expeditions/atlas/](http://www.nationalgeographic.com/expeditions/atlas/), ask students to research mythic stories, past and present, and then locate, label, and describe various myths and their geographic origins on a classroom map.

# Section Two: Mythic Creatures Land Realm

## Creatures of the Earth *(continued)*

### Post Activities

1. Ask students to make a chart that compares and contrasts Western and Asian unicorns. How were unicorns depicted in Western and Asian cultures? How can learning about these mythic creatures and their origins help us understand people and cultures around the world? Why are people fascinated with unicorns?
2. Ask students to choose land-dwelling creatures visible in popular culture (eg., movies, mascots, ads, video games, comics, etc.) and research their mythic origins. What did they symbolize in the past? How and why are these symbols still in use today? Provide an example of a creature in addition to where they can be found.
3. In small groups, ask students to discuss the Barong display that they saw in the exhibition. Next, ask the group to design masks and put on their own performances based upon Barong performances presented in the exhibition.



### Dwarf elephant skull

The myth of the Cyclops may have been fueled by fossil discoveries. Ancient Greeks who uncovered the skulls of dwarf elephants on Mediterranean islands may have mistaken the central nasal cavity—where the trunk was attached—for a single eye socket, that suggested one-eyed giants had once roamed the land.

© D. Finnin/AMNH

## Creatures of the Sky

**H**ave you ever wondered what it feels like to fly? The smallest bird has powers we will never share—but mythic creatures of the air have even greater powers. Imagine a bird so huge it blocks out the sky, or stirs up storms with its wings. In myths and stories, winged horses, dragons, and even people all have the power of flight. These stories help express the wonder and awe inspired by looking up at the sky. Mythic creatures of the sky can be found in myths from various parts of the world. Each country has a different interpretation of what that creature means to them culturally. Many of the stories are thousands of years old.

Be sure to direct students to several interactive elements in this gallery, like the touchable reproduction of Haast's Eagle talon and the Roc model. A video program includes three story segments on dragon storytellers, dragon parades, and the process of creating dragons for popular movies.

### Armoured Pegasus

In Greek mythology, Pegasus was a winged horse, the son of Poseidon and Medusa. He sprang fully formed from Medusa's neck when she was beheaded by the hero Perseus. This sculpture was carved by Joe Leonard, a noted contemporary American woodcarver.

© Andrew Ressetti, on loan from Betty Jean Conant



## Creatures of the Sky *(continued)*

### Guiding Questions

1. There are many different versions of the origin of the creature “Roc”. What two pieces of archaeological evidence contributed to the different versions?
2. Many of the stories we think of as “Greek” myths actually have roots in other ancient cultures. Observe an illustration of Greek and Egyptian sphinxes. Are there any similarities between the two? What are the main differences?
3. What is the importance of Nagas and Garuda in the Buddhist religion?



### **Aepyornis model**

Seven hundred years ago, Arab traders told of a bird so huge it could lift an elephant into the sky. Sailors said it lived on an island off the southern coast of Africa. Coincidentally, a giant bird called the Aepyornis once lived on the island of Madagascar. Now extinct, the bird—which is the largest ever to have lived, at over ten feet tall—laid the largest eggs in the world, at over two gallons.

© D. Finnin/AMNH

# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky *(continued)*

### Answers to Guiding Questions

1. The roc myth possibly was created from two archeological pieces of evidence. In Madagascar, fossil bones and eggs prove that a half ton bird called the Aepyornis lived on the island. The nickname elephant bird probably came from the roc story. In New Zealand, evidence of bones and talons have proved the giant bird, now called the Haast's eagle, was more than a myth. Unlike the Aepyornis it could fly. It had a wingspan of nearly 9 feet and preyed on moas, large flightless birds related to ostriches. It lived until AD 1500, recent enough to possibly have been remembered by the Maori's ancestors.
2. While there are no physical similarities between Greek and Egyptian sphinxes, they are both symbols of mythology. The Greek sphinx is often aggressive and hostile, attacking and snacking on people who passed by. It has the head and torso of a woman, the body of a lion and the wings of an eagle. The Egyptian sphinx may come in two different forms. One has the head of man and the body of a lion. The other has the head of a ram or falcons and the body of a lion. While the Greek sphinx is cruel and aggressive, the Egyptian sphinx is a symbol of powerful rulers.
3. In the Buddhist stories, there are many Garudas. They are often seen as agents of faith, wrestling with Nagas until they become Buddhist. For Buddhists, the story of Garuda overcoming Nagas symbolizes the spread of Buddhism throughout Asia, with Nagas representing Indigenous religions and deities that were converted to Buddhism. Nagas are sometimes thought of as local deities that became part of Buddhism, and they retain their powers to assist people. Nagas can bring fertility and women seek their aid in having children.



### Garuda and Nagas

Garuda, a minor deity in the Hindu pantheon, serves as Vishnu's mount. In Buddhist iconography, Garudas often wage war on Nagas, large snakes sometimes equated with local southeast Asian gods who are subsequently converted to Buddhism. Tibet, 19th or 20th century, metal, bronze, and gilt.

© D. Finnin/AMNH

# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky *(continued)*

### Pre Activities

1. As a class, read the story of the creation and death of Pegasus. Explore how Zeus transformed him into a constellation. Ask students to make up mythical stories about how the different constellations came to exist.
2. Ask students to investigate the sphinx and its origin. Next, prompt them to create riddles about the sphinx that other classmates must answer in a game-show scenario.
3. Direct students to imagine they are paleontologists who have found fossils that belong to an animal of unknown origin. Tell them there is evidence that this creature once flew. Give the students an envelope with several “fossil bones” (included in this guide) and ask them to figure out how the bones may have fit together. Ask each group to make inferences about the creature based on the skeleton. Ask students to draw a picture of what they think their creature is and write a story about its origin and lifestyle (the bones depict those of a flying, prehistoric reptile, the Pterosaur).

### Field Trip Activities

1. Choose a creature of the sky in the exhibition. List any actual animal parts that you can identify. Based on the traits of the creature, what can you infer about the behavior and meaning of the creature? Collect any evidence provided by the label and make notes to refer to once back in the classroom.
2. Throughout the exhibition you will find objects and images with representations of mythical creatures of the sky. Find one example of Garuda, a netsuke, and a phoenix. Draw a picture of each and explain how each one is important to the culture from which it originated.
3. Compare and contrast the myths of Garuda and Naga with the myth of Tengu. How is each one important to Buddhism (and other religions)? What is your interpretation of the purpose of these stories? To further explore birds, direct students to our *World of Birds* and *North American Birds* exhibitions.



### Tengu netsuke

This mid-18th-century netsuke (a small and often intricately carved toggle used to fasten a small container to a kimono sash) portrays a tengu (a Japanese mythological bird) emerging from a giant egg. The tengu is dressed like a mountain priest, and is, like the priest, versed in magic and mischief. In folk tales, tengu sometimes abduct human beings for brief, airborne adventures, and can also impart superhuman swordsmanship.

© D. Finnin/AMNH

# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky *(continued)*

### Post Activities

1. Remind students of the examples of mythical creatures they saw in the exhibition that occur in pairs. These duos often battle each other to help storytellers express ideas. Ask students to design two mythical sky creatures that they consider as opposites. Have them draw a picture of each, and write a narrative about how the two creatures are opposites.
2. Ask students to pick one of the mythical creatures of the sky seen in the exhibition, and write a newspaper article that details the origin, cultural history, and why they think it is important to learn more about the particular creature.
3. In Chinese tradition, the phoenix is the divine ruler of birds and a symbol of feminine grace. Ask students to design (sketch) and then paint a picture of a robe that they would like to wear. Robe designs should incorporate some of the 5 Chinese virtues (goodness, duty, proper behavior, kindness, and reliability). Ask students to write about the virtues and why they have chosen specific ones to represent on their robe designs.



### Roc model

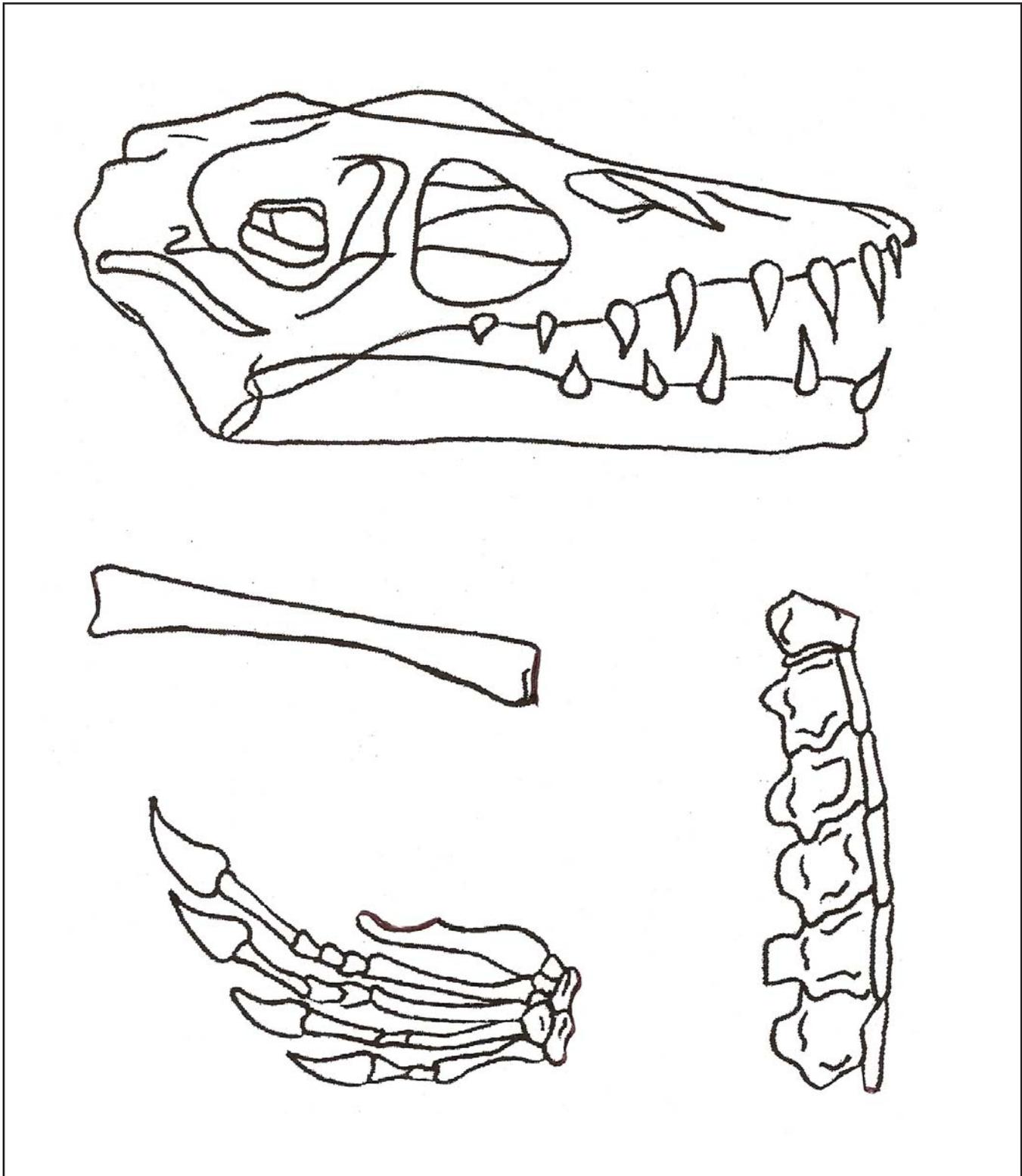
This 11-foot-long Roc with large, sharp talons swoops above the heads of visitors with a wingspan of nearly 20 feet in the new special exhibition *Mythic Creatures: Dragons, Unicorns & Mermaids*.

© D. Finnin/AMNH

# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky (continued)

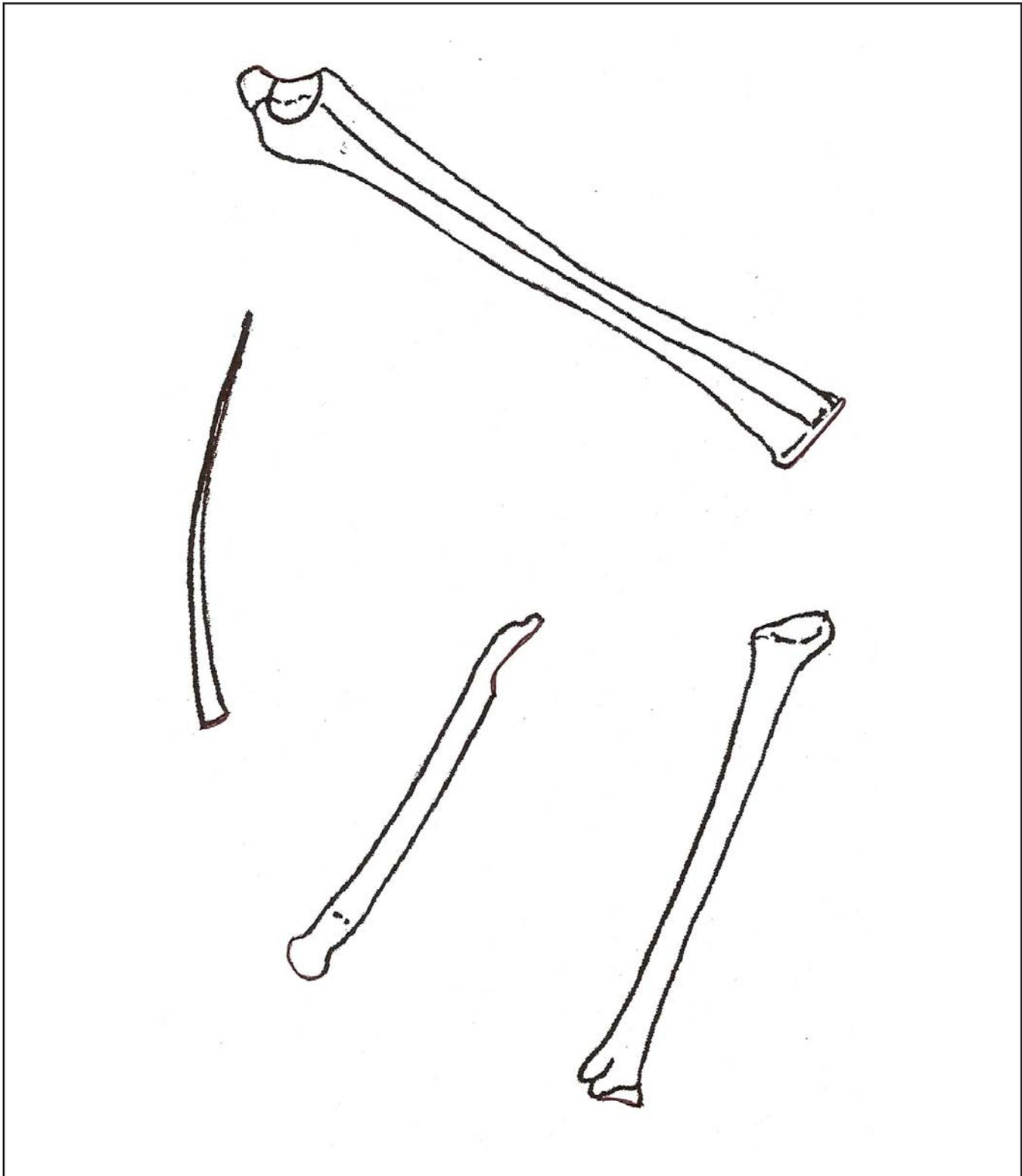
“Fossil Bones” for *Mythic Creatures Air Realm Pre-Activity #3—Set 1*



# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky *(continued)*

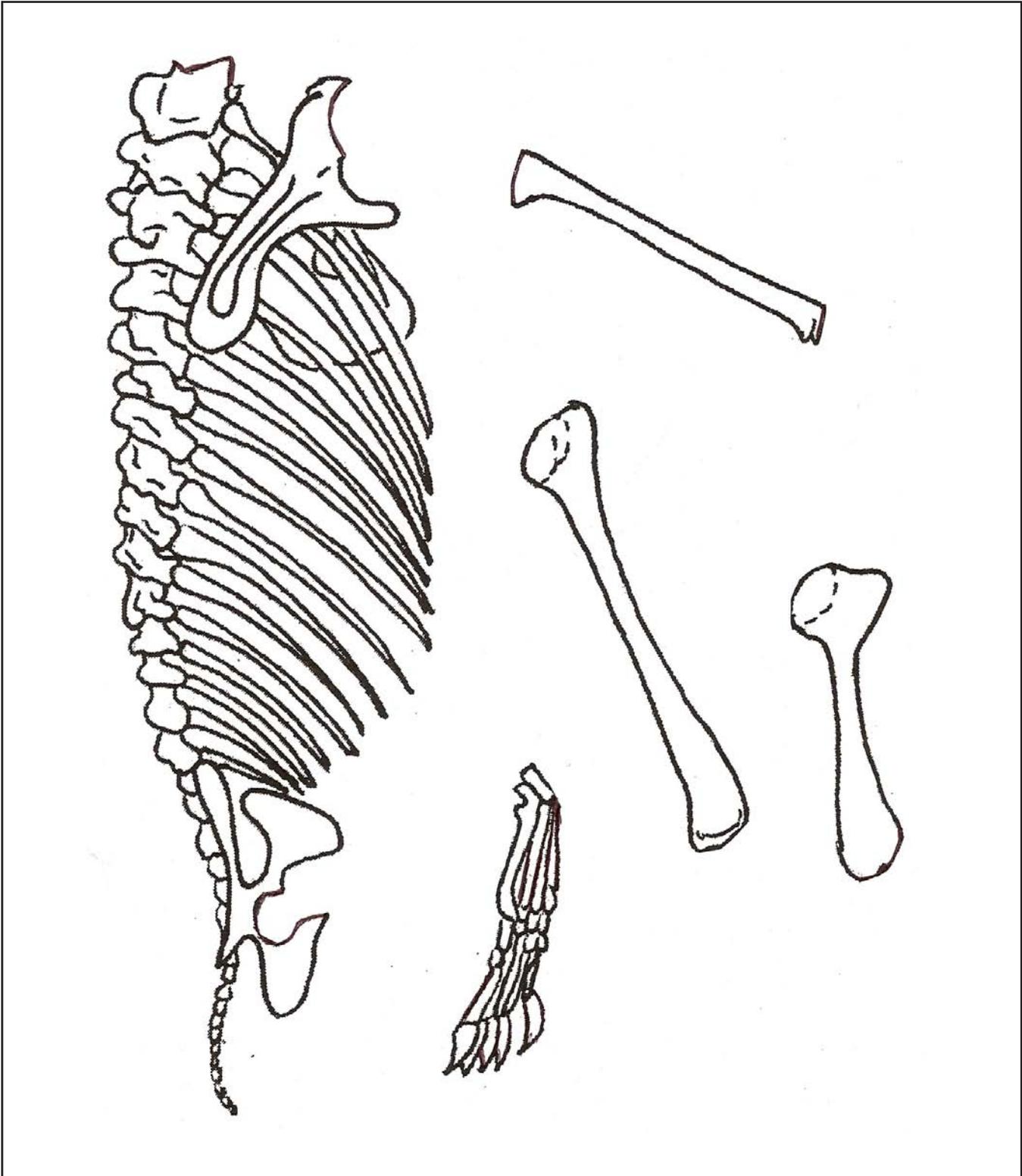
“Fossil Bones” for *Mythic Creatures Air Realm Pre-Activity #3—Set 2*



# Section Three: Mythic Creatures Air Realm

## Creatures of the Sky (continued)

“Fossil Bones” for *Mythic Creatures Air Realm Pre-Activity #3—Set 3*



# Section Four: Mythic Creatures Dragons

## Creatures of Power

**O**f all mythic creatures that rise from the water, prowl across land or fly through the air, the dragon has won the most fame. Stories of snake-like beasts with fabulous powers inspire awe in almost every part of the world. Friendly dragons in Asian tales can shrink so small that they fit in a teacup – or grow so large that they darken the sky. Dragons in Europe can slaughter men with their putrid breath, or spit fire and set cities ablaze. Dragons in Asia have sweeping powers. They breathe clouds, move the seasons and control the waters of the rivers, lakes, and seas. The earliest dragon legends date back thousands of years and the creature still haunts us today.



Direct students to the 120-foot-long Chinese parade dragon costume. Visitors can also build their own dragon with a computer program, and then watch their dragon projected on a screen flying through the air with other dragons. Encourage students to make comparisons between the Asian and European dragons depicted in the gallery. They will also want to explore the natural history of dragons including dragon bone medicine, dragon's blood, and a "dragon" skull.

### **Barong Ket**

The Barong Ket is a lion-like creature. His appearance in Balinese dance drama signifies a return to order and calm after the chaos imposed by the witch Rangda. The mask of a Barong Ket costume is borrowed from Hindu-inspired sculpture while the two-person dancing body was probably inspired by the dancing lions and unicorns of Chinese festivals. The Barong's mask is consecrated to be inhabited by a spirit. During rituals and when not in use, the mask is given an honored place in a village temple. Unconsecrated masks are carved and sold to tourists.

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# Section Four: Mythic Creatures Dragons

## Creatures of Power *(continued)*

### Guiding Questions

1. Stories and pictures of dragons can be found in many cultures. Compare and contrast a depiction of a European dragon with an Asian dragon. What inferences can be made about how each culture perceives dragons based on observations about these two types of dragons?
2. Although most people today view dragons as mythical creatures, in the past, some people believed that dragons were very real. In traditional Chinese medicine, people are treated for numerous ailments with “dragon bones”. Where does this medicine come from? Did any other cultural groups use parts of dragons to cure ailments?
3. Symbols of dragons can be found on many objects made in Europe and Asia. How is the depiction of European dragons different from the depiction of Asian dragons?

### Answers to Guiding Questions

1. The Asian dragon is a symbol of imperial rule. It is often portrayed with whiskers, a bump on the forehead (Chi'-ih muh), 81 scales, sweet smelling saliva, excellent eyesight, four legs with up to five claws on each foot. Chinese dragons sleep in winter and wake in spring, when they rise to the sky to make rain. European dragons may have wings, may breathe fire, live in swamps or caves, have either four legs, two legs or none and in many European stories the dragon is the symbol of the devil. Inferences that can be made are that many peoples in Asia view dragons as powerful symbols that are in harmony with heaven and earth. Many Europeans viewed dragons as evil creatures that should be slaughtered, not revered.
2. Traditional Chinese medicine uses “dragon bones” to cure a variety of ailments, from madness to dysentery. Practitioners obtained the necessary bones from fossil remains of extinct mammals. Arab merchants used “dragon’s blood”, a resin that seeps from the fruit of the palm-like dragon’s blood tree. The resin was used in Europe and the Middle East to treat inflammations and infections.
3. In Europe, dragons had a negative image. In religious texts saints were often pictured as battling or slaying dragons. During the Middle Ages, dragons became popular figures appearing on banners, seals and other emblems of authority and military might. Most coins were adorned with dragon-killing saints. In Chinese cultures, dragons decorated the robes of the emperor and his family. The Chinese dragon was a powerful force whose influence spread well beyond China’s borders.

### Pre Activities

1. Ask students to develop a KWL chart, such as the one provided on page 29. Have them write down what they already know about dragons, what they would like to learn about them, and what they learned from visiting the exhibition.
2. Read a story that involves dragons (examples: *The Dragon Prince*, *Dragon Riders*, or *Eragon*). Ask students to write and illustrate a similar story about their own dragon. Another option is to have students create movie posters that showcase their dragon story.
3. Find movie clips that involve dragons and ask students to discuss how dragons are often portrayed in movies, on TV, and in books. Ask students to come up with movie ideas/trailers that portray dragons in either a positive or negative way.

# Section Four: Mythic Creatures Dragons

## Creatures of Power *(continued)*

### Field Trip Activities

1. Ask students to find examples of dragons in other galleries of the exhibition. Then ask students to illustrate the dragon and write a brief description about it, noting if it is a dragon of the air, water, or land. Ask students to take notes, collecting information to help them craft a longer narrative once they are back in the classroom.
2. While visiting the *Dragon Pavilions* in each section of the exhibition, have students observe the various dragon symbols on objects. Ask students to describe how dragons are perceived and depicted in different cultures. Do dragons mean different things to cultures of the East and West? What leads them to this conclusion? Ask students to share their ideas in the exhibition.
3. While visiting the exhibition, have students look at ways dragons were used for military purposes. Specifically focus on comparing eastern and western cultures. With this information, ask students to design and illustrate a coat of arms depicting a dragon from either the East or the West.



### Dragon shadow puppet

East Asian dragons, like the one portrayed by this 19th-century Chinese shadow puppet, are the underwater equivalent of kings and emperors, reigning over watery realms. They ascend to heaven at the start of the agricultural season and bring the necessary rains.

© D. Finnin/AMNH

# Section Four: Mythic Creatures Dragons

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## Creatures of Power *(continued)*

### Post Activities

1. Remind students of the dragons viewed in the pavilion and discuss the difference in how they were portrayed by each culture. Ask students to create a plaque using Model Magic that depicts a dragon in action. Then ask students to write a newspaper article describing the actions of the dragon. To investigate shadow puppets further, check out the Harris Educational Loan Center Experience *Box British Airways: Religion and Ceremony*.
2. Ask students to recall how Chinese dragon shadow puppets work, and the types of settings where they are used. Based on the prevalence of dragon shadow puppets, ask students to make inferences about what dragons mean in Chinese culture. Ask them to create their own shadow puppet, using The Kennedy Center ArtsEdge lesson at [www.artsedge.kennedy-center.org/content/3887/](http://www.artsedge.kennedy-center.org/content/3887/).
3. Have students imagine that they are doctors in early China. In groups, ask them to create advertisements that proclaim the benefits of being treated with “dragon bones” or “dragon blood”.
4. Ask students to make their own shadow puppets and create a performance to put on for other classes.

# Activity Sheet: KWL Chart

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<b>K</b> What I Know	<b>W</b> What I Want to Learn	<b>L</b> What I Have Learned



## < *Alsdorf Hall of Northwest Coast and Arctic Peoples*

Compare cultural interpretations of the environment and animals, as well as life in the Arctic with that along a temperate Northwest coast, and see how these environments led to two unique cultures.

Students can examine 19th Century Northwest Coast house posts that were frequently placed in front of dance houses in the 19th Century. House posts were often carved with land otters and other beings of supernatural significance.

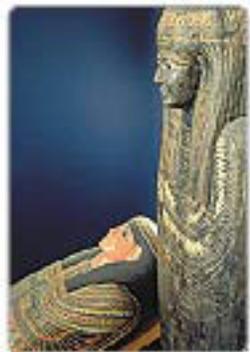
While in this exhibition, encourage students to also explore how traditional Arctic carvers in the 19th Century also incorporated stylistic elements into their stone carvings with both mythological and real life depictions.



## < *The Ancient Americas*

Follow the epic tale of the peoples in the Americas. This exhibition presents the diverse and fascinating story of the ancient cultures of North, Central, and South America and the Caribbean, from the earliest humans in the Western Hemisphere to the end of AD 1400.

Visit the Rulers and Citizens section of this exhibition to learn about Moche supernatural warriors. Moche artists often associated warriors with animal predators such as foxes or owls, likening warfare to hunting prey. Many of these creatures, even the birds, have fangs—a symbol often used to identify deities and supernatural beings in ancient Peru.



## < *Inside Ancient Egypt*

Hear the story of the world of the ancient Egyptians. Unlock secrets of ancient Egyptian mummies and learn about life and the afterlife in this early civilization.

When the Greek historian Herodotus (c. 464–425 BC) visited Egypt, he learned of the sacred benu bird of Egyptian myth. He called it the phoenix, and wrote that it came to the Egyptian Temple of the Sun once every 500 years. Later writers told a more complex story: every five centuries, the phoenix burned in a fire lit by the Sun and then rose to begin life again. Inspired by this tale, many poets and artists have adopted the phoenix as a symbol of renewal and rebirth. Have students search for depictions of Egyptian birds and other beings depicted in Egyptian myth.



## < *Pacific Spirits: Life, Death, and the Supernatural*

Investigate the beliefs, religion and ancestor veneration of Pacific peoples. Students can see firsthand how masks (“eharo”) and carved and wooden figures (“malanggans”) crafted in Papua New Guinea portray mythical beings.

## Programs for Children

Visit us on-line at [www.fieldmuseum.org](http://www.fieldmuseum.org)

### ***Mythic Creatures Day Camp***

In conjunction with Lookingglass Theatre, The Field Museum is offering 11-12 year olds a chance to spend a week learning about mythic creatures in conjunction with our temporary exhibition of the same name. Instructors from Lookingglass will take you through the exhibition while guiding you through a fun week of programs, games, and activities!

Monday, June 23–Friday, June 27, 2008

12pm–4pm each day

\$220 per person, \$200 for members

### **Summer Worlds Tour 2008: *Mythic Creatures***

Track the origins of legendary creatures including dragons, unicorns, and mermaids as we explore *Mythic Creatures* at The Field Museum, outerspace at the Adler Planetarium, and underwater creatures at the Shedd Aquarium.

4 1-week sessions, 9am–3:30pm:

July 7–July 11, 2008

July 14–July 18, 2008

July 21–July 25, 2008

\$250, \$230 for members

## Family Programs

Visit us on-line at [www.fieldmuseum.org](http://www.fieldmuseum.org)

### **Create a Play in One Day!**

Put your little one in the director's chair! Children ages 5–11 will write a short play about birds, fossils, or dinosaurs under the tutelage of professional actors, cast it with their new friends from the workshop, and perform for the general public at the Museum that same day. Bring a brown bag lunch for our break.

Presented by the Foundation Theatre Group

June 21, 2008 (Birds), 11:00–2:00pm rehearsal and writing; 2:30pm performance

July 19, 2008 (Fossils), 11:00–2:00pm rehearsal and writing; 2:30pm performance

August 16, 2008 (Dinosaurs), 11:00–2:00pm rehearsal and writing; 2:30pm performance

\$25, \$18 for members

### **Dragon Dance Performances**

Join us for a lively performance by the Chicago Chinese Cultural Center as they demonstrate the beauty of the traditional Chinese dragon dance.

Saturday, March 22, 2008, 12:00pm

Free with Basic admission

## Experience Boxes

Mythic creatures can offer perspective on how scientific discovery changes over time. Before formal scientific methods came about, a fleeting glimpse of an animal or a finding of unfamiliar bones was often enough to confirm a being's existence. Many mythic creatures are bizarre assemblages of parts of real animals. As methods for scientific observation and interpretation evolved, it became clear which animals exist in nature—and which are mystical. Use the following Experience Boxes to investigate early dinosaur and fossil remains that were often interpreted as mythical creatures across the world:



### **Dinosaurs and Other Mesozoic Creatures**

Use fossils, replicas, and timeline charts to learn about dinosaurs and other Mesozoic plants and animals. Pre-K and higher.

### **Dinosaurs and their Times: Cretaceous**

Place models of various Cretaceous Period dinosaurs—*Tyrannosaurus*, *Maiasaura*, and *Triceratops*—in a classroom diorama. Kit includes casts of a *Tyrannosaurus* tooth and claw. Especially recommended for Pre-K through first grade.

### **Dinosaurs and Their Times: Jurassic**

Jurassic Period dinosaur models—*Apatosaurus*, *Brachiosaurus*, and *Allosaurus*—are placed in a classroom diorama. Kit includes casts of an *Allosaurus* tooth and claw, posters, and books. Pre-K and higher.



### **Fossils**

Fossils give us clues to life in the past. Touch the physical evidence of plant and animal life from eons ago. The fossil collection spans several geologic periods. Pre-K and higher.

### **Fossils from Paleozoic Seas**

New forms of life exploded in the warm seas of the Paleozoic Era, and their remains were preserved as fossils. Examine fossil remains of trilobites and other Paleozoic life forms to learn about life's diversity, extinction, and fossil formation. Pre-K and higher.

### **Ice Age Mammals of Chicago**

What evidence do we have that giant mammals once lived in Chicago? Examine three reproductions of teeth from the Museum's collection—the mammoth, mastodon, and giant beaver.

Visit us on-line at [www.fieldmuseum.org/harrisloan](http://www.fieldmuseum.org/harrisloan), or call 312.665.7555

## Experience Boxes *(continued)*

Stories and depictions of mythic creatures embody belief systems, identity, moral codes, impressions of the natural world, and other aspects of humanity. Use these Experience Boxes to investigate the role of mythical animals and beings in stories and art:



### **Egyptian Hieroglyphs**

Explore the depiction of mythic beings in Egyptian hieroglyphs. Use rubber stamps to write your name in this ancient picture script, then examine a piece of real papyrus, the ancient Egyptian form of paper.

### **Ancient Egypt: Planning for the Afterlife**

Assemble a model of The Field Museum's full-scale mastaba tomb to learn how ancient Egyptians prepared for death and mythic beings associated with the afterlife. Kit includes books and activities.

### **Maori Art and Myths: A Basket of Stars**

Colorful storybooks and an audiovisual presentation share lively tales traditionally told by the Maori peoples of New Zealand. Kit includes a Maori carved figure.

## Exhibit Cases

Explore some of the animals and plants featured in stories and myths across the world and through time! Fill your classroom with just some of the 150+ exhibit cases available, including:



**Fox Bat**  
**Banana Spider**  
**Beetles**  
**Corn**  
**Lotus**  
**Snake**  
**Spotted Turtle**  
**Jumping Mouse**  
**Gray Fox**  
**Snowshoe Hare**  
**Porcupine**  
**Water Lilly**  
**American Bison**  
**Great-Horned Owl**

## Books for Educators and High School Level Students

- Andersen, Hans Christian. (1998). *Hans Christian Andersen's Fairy Tales: A Selection*. Oxford University Press.
- Ellis, Richard. (1994). *Monsters of the Sea*. Knopf.
- Gilmore, David. (2002). *Monsters: Evil Beings, Mythical Creatures, and All Manner of Imaginary Terrors*. University of Pennsylvania Press.
- Harrison, Barbara. (1999). *Origins of Story: On Writing for Children*. Margaret K. MxEldey.
- Heaney, Seamus. (2000). *Beowulf*. Farrar, Straus and Giroux; Bilingual edition.
- Homer (Robert Fagles, translation). (1996). *The Odyssey*. Viking Adult.
- Mayor, Adrienne. (2001). *The First Fossil Hunters: Paleontology in Greek and Roman Times*. Princeton University Press.
- Nigg, Joseph. (1984). *Guide to the Imaginary Birds of the World*. Apple-Wood Books.
- Nigg, Joseph. (1995). *Wonder Beasts: Tales and Lore of the Phoenix, the Griffin, the Unicorn, and the Dragon*. Libraries Unlimited.
- Nigg, Joseph. (1999). *The Book of Fabulous Beasts: A Treasury of Writings from Ancient Times to the Present*. Oxford University Press.
- Payne, John. (1932). *The Book of One Thousand and One Nights (Arabian Nights)*. Blue Ribbon.
- Polo, Marco and Ronald Latham. (1958). *The Travels of Marco Polo*. Penguin Classics.
- Shuker, Karl P.N. (1995). *Dragons: A Natural History*. Simon & Schuster.
- Tolkien, J.R.R. (1968). *The Hobbit*. Dramatic Pub.
- Tolkien, J.R.R. (1986). *The Lord of the Rings*. Del Rey.

## Books for Middle School and High School Students

- Alexander, Lloyd. (1978). *Chronicles of Prydain*. Yearling.
- Borges, Jorge Luis. (2005). *The Book of Imaginary Beings*. Viking Press.
- Coleman, Loren and Jerome Clark. (1999). *Cryptzoology A to Z: The Encyclopedia Of Loch Monsters, Sasquatch, Chupacabras, and Other Authentic Mysteries of Nature*. Fireside.
- Covey, Jacob. (2007). *Beasts! Fantagraphics*.

(continued)

- Hamilton, Edith. (1998). *Mythology*. Back Bay Books.
- Lefkowitz, Mary. (2005). *Greek Gods, Human Lives: What We Can Learn from Myths*. Yale University Press.
- LeGuin, Ursula K. (1999). *A Wizard of Earthsea*. Tandem Library.
- McCaffrey, Anne. (1992). *Dragonriders of Pern*. Del Rey.
- Paolini, Christopher. (2007). *Eldest*. Knoph Books For Young Readers.
- Paolini, Christopher. (2004). *Eragon*. Knoph Books For Young Readers.

## Books for Elementary School Students

- Carle, Eric. (1991). *Eric Carle's Dragons, Dragons*. Philomel.
- Coville, Bruce. (2003). *Jeremy Thatcher, Dragon Hatcher*. Hodder Children's Books.
- D'Aulaire, Ingri. (1962). *D'Aulaire's book of Greek Myths*. Doubleday Books for Young Readers.
- D'Aulaire, Ingri. (2005). *D'Aulaire's book of Norse Myths*. New York Review of Books.
- Gannett, Ruth Stiles. (2005). *My Father's Dragon*. Yearling.
- Grahame, Kenneth. (1953). *The Reluctant Dragon*. Holiday House.
- Lewis, C.S. (2001). *Chronicles of Narnia*. HarperCollins Publishers.
- McCaughrean, Geraldine. (2000). *Saint George and the Dragon*. Oxford University. Press.
- Nesbit, Edith. (2004). *The Phoenix and the Carpet*. BookSurge Classics.
- Posner, Pat. (2002). *Fantastic Creatures from Greek Myths*. Peter Bredrick.
- Vaughn, Marcia K. (1996). *The Dancing Dragon*. Mondo Publishing.
- Yep, Lawrence. (1999). *The Dragon Prince: A Chinese Beauty & The Beast Tale*. Harper Trophy.
- Yolen, Jane. (1998). *Merlin and the Dragons*. Puffin.

**The Field Museum: *Mythic Creatures***

[www.fieldmuseum.org/mythiccreatures](http://www.fieldmuseum.org/mythiccreatures)

**The American Museum of Natural History: *Mythic Creatures***

<http://ology.amnh.org/mythiccreatures>

<http://ology.amnh.org/mythiccreatures/stufftodo/stationery.php>

**English Language Arts Focus**

Encyclopedia Mythica

<http://www.pantheon.org/>

**Scholastic**

<http://content.scholastic.com/browse/article.jsp?id=11846>

<http://content.scholastic.com/browse/article.jsp?id=11957>

**Social Studies Focus**

Adler Planetarium, Our Moon in Ancient Myth

[www.adlerplanetarium.org/cyberspace/moon/culture.html](http://www.adlerplanetarium.org/cyberspace/moon/culture.html)

**The American Museum of Natural History**

[www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity3.html](http://www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity3.html)

[www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity1.html](http://www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity1.html)

[www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity4.html](http://www.amnh.org/education/resources/rfl/web/mythicguide/activities/activity4.html)

**Strange Science: The Rocky Road to Modern Paleontology and Biology**

[www.strangescience.net](http://www.strangescience.net)

**The Minnesota Institute of Arts**

[www.artsmia.org/world-myths/](http://www.artsmia.org/world-myths/)

**National Library of Australia**

[www.nla.gov.au/exhibitions/bunyips/](http://www.nla.gov.au/exhibitions/bunyips/)

## Creatures of Water

- In the ocean near Haiti in 1493, Christopher Columbus—probably glimpsing a manatee—reported seeing three mermaids but said they were “not as pretty as they are depicted, for somehow in the face they look like men.”
- Giant and colossal squids have the largest eyes of any living creature; each eye can be as large as a human head.
- The mythical Kraken—perhaps based on sightings of giant squid tentacles—may be the largest sea monster ever imagined; some stories described it as more than 1.5 miles around with arms as large as ship’s masts.
- Many documented sightings of what were thought to be sea serpents were later debunked as cases of mistaken identity. For instance, several “sea monster” carcasses turned out to be partially decayed basking sharks (an immense fish that grows to 30 feet in length), a “baby sea serpent” proved to be a deformed blacksnake, and an enormous serpent turned out to be a mass of floating seaweed.
- The story of Sedna is one of the most dramatic tales of the Inuit peoples of the Arctic regions of Canada and Greenland. In a deadly tale of betrayal on the stormy sea, a young woman is tossed overboard by her own father, who cuts off her fingers to keep her from climbing back into the boat. Her fingers become the whales, seals, and walrus on which the Inuit depend for food and materials.
- Several pictures of sea serpents on old maps appear to be based on sightings of the oarfish or ribbon fish. A long eel-shaped fish that grows up to 36 feet, the oarfish has a crest of bright red spines on its head and a spiny dorsal fin running down its entire back.

## Creatures of Land

- The remains of *Protoceratops* dinosaurs, which lived from 145.5 to 65.5 million years ago, may have influenced descriptions of griffins. Both *Protoceratops* and griffins have birdlike beaks, but bodies with four legs—an unusual combination. And *Protoceratops* fossils have very long shoulder-blades, a feature that may explain why griffins are said to have wings.
- Ancient Greeks found enormous bones they thought to have belonged to real giants who lived and died. Even today large and surprisingly humanlike bones can be found in Greece; modern scientists understand them to be remains of mammoths, mastodons, and woolly rhinoceroses that once lived in the region.
- The tales of the European one-horned magical unicorn were first told over 2,000 years ago by Greek travelers. In the Middle Ages, Danish sailors brought narwhal tusks—long, white, and spiraled—to Europe, where buyers considered them to be valuable, magical remains of the elusive unicorns, thought to be able to cure a range of illnesses, from epilepsy to the plague. The Asian unicorn, first mentioned in written stories around 2700 B.C.E., differs in appearance by a scaly coat, one or multiple flesh-covered horns, and a wolf-like head.
- Enormous apes are more than a myth; the *Gigantopithecus blacki*, now extinct, is a very distant relative of humans that lived in Southeast Asia for almost a million years, until perhaps as recently as 300,000 years ago.

## Creatures of Air

- Seven hundred years ago, Arab traders told of a bird so huge it could lift an elephant into the sky. Sailors said it lived on an island off the southern coast of Africa. Coincidentally, a giant bird called the Aepyornis once lived on the island of Madagascar. Now extinct, the bird—which is the largest ever to live, at over ten feet tall—laid the largest eggs in the world, at over two gallons.
- According to Hindu and Buddhist stories, the giant, birdlike Garuda fights its eternal enemy, the snakelike Nagas. The Garuda is now the national symbol of Thailand and Indonesia.
- When the Greek historian Herodotus (c. 464–425 B.C.E.) visited Egypt, he learned of the sacred bennu bird of Egyptian myth. He called it the phoenix, and wrote that it came to the Egyptian temple of the Sun once every 500 years. Later writers wrote that every five centuries the phoenix burned in a fire lit by the Sun and then rose to begin life again. Inspired by this tale, many poets and artists have adopted the phoenix as a symbol of renewal and rebirth.

## Dragons

- Dragons that lurk in European stories are powerful, wicked, and dangerous. Some nest in caves, guard stockpiles of treasure, and devour sheep or even young girls. The dragon has been reviled in the Christian world as the image of evil. In many stories, a dragon dies by the sword of a brave and honorable hero, ending a furious battle between sin and virtue, darkness and light.
- Dragons—part of the legends of East Asian cultures for more than 4,000 years—have sweeping powers, including breathing clouds, moving the seasons, and controlling the waters of rivers, lakes, and seas. They are linked with yang—the masculine principle of heat, light, and action—and opposed to yin—the feminine principle of coolness, darkness, and repose.
- In Chinese art, the dragon is sometimes paired with the phoenix. Together, they are often equated with the harmony of marriage, and the union of the complementary cosmic elements yin and yang.
- European naturalists once considered the dragon a close relative of the snake. In a text from 1640, Ulissis Aldrovandi, a professor of natural science at the University of Bologna, discusses their habits. “Winged dragons flying through Africa,” he writes, “beat enormous animals such as bulls to death with their tails.”
- Chinese scholars classified the dragon as one of the 369 animal species with scales. Long before the development of paleontology, people unearthed fossilized bones in Asia and Europe—and believed they had found the remains of dragons from an earlier age.
- With their enormous size, reptilian shape, and threatening teeth and claws, some dragons might easily be taken for cousins of *Tyrannosaurus rex*. Living dinosaurs did not inspire the dragon idea—they died out long before people were around to observe them—but the fossil remains of extinct animals have sometimes been taken for dragon bones, and helped perpetuate old dragon stories.

