This gallery is laid out as a library of objects encompassing virtually all contemporary vertebrates.

**Introduction to the gallery**

Anatomy is the study of the form and structure of animal organs. Comparative anatomy is the study of the differences and similarities allowing us to distinguish and classify species or larger groups (orders, families, etc). A descriptive science of the anatomical collections and fossils were displayed here to symbolize the diversity of nature. The goal is to emphasize the beauty of these historic places and to display our collections while preserving the spirit of late 19th-century museum concepts.

**History of the building**

The building was designed by the architect Ferdinand Dutert and opened to the public in 1898 in preparation for the 1900 World’s Fair. The architecture of the galleries reflects the spirit of the era: Beams and metallic consoles combined with stone. Dutert, calling upon various artists to create a decoration scheme inspired by nature, was a forerunner of Art Nouveau. Anatomical collections and fossils were displayed here to symbolize the diversity of nature. To mark the centenary of the building, a renovation of the galleries was launched.

**Types of specimens (1st description)**

- Southern whale (Desmoulins, 1822)
- Humpback whale (Cuvier, 1823)
- Amouss beaked whale (Duvernoy, 1851)
- Long-beaked echidna (Genain, 1877)

**Objects with historical significance**

- Rhinoceros from the Menagerie at Versailles
- Stathouder orang-utan from Holland
- Stathouder giraffe from Holland
- Father David’s deer
- Ibis of Geoffroy Saint-Hilaire

**Species recently rendered extinct by Man**

- Common or Rorqual whale
- Cœlacanth
- Narwhal, or “sea unicorn”
- Okapi
- Ibis of Geoffroy Saint-Hilaire

**Species with historical significance**

- Arnoux’s beaked whale (Duvernoy, 1851)
- Humpback whale (Cuvier, 1823)
- Southern whale (Desmoulins, 1822)

**Comparative anatomy**

Comparative anatomy of organs responsible for main bodily functions of the organism (respiration, circulation, etc)

**Embryos and developmental anomalies**

Skeletons displayed in linear order from fish to man, showing the similarities between groups

**Various skeletons in groups and in the central display cases show the diversity of adaptation to environmental conditions**

**Central grouping**

1. Panther - lion - jaguar - wolf, hyena - bear - sea lion - walrus...
2. Rhinoceros - tapir
3. Rhinoceros - horse - homicide
4. Hippopotamus
5. Giraffe - dromedary - camel
6. Buffalo - antelope - yak
7. Giraffe - bull - buffalo - bison - elk
8. Mountain sheep - reindeer - antelope - deer
9. Elephant - manatee - dugong - sea cow
10. Whale - sperm whale - orca

**Central window**

A variety of large monkeys
Rare or extinct animals
Marsupials
Skeletons of mummified animals
Birds
Reptiles
In this gallery, the fossils trace more than 600 million years history of life.

**WHAT IS PALEONTOLOGY?**
Paleontology is the science that studies the history and evolution of life on Earth during more than 3 billion years. It is based on the study of fossils. The term ‘fossil’ refers to any trace of animal or plant life (bones, teeth, shells, imprints of leaves, clutches of eggs, animal tracks, etc.) preserved in sedimentary rocks.

Paleontology of vertebrates was developed at the beginning of the 19th century by Georges Cuvier, who studied fossils in gypsum quarries in Montmartre and compared them with the bones of existing animals. In the middle of the 19th century, Alcide d'Orbigny, the first official chair of paleontology, assembled a rich collection of 10,000 invertebrate fossils. Later, Albert Gaudry succeeded in endowing the museum with a true Gallery of Paleontology.

**INTRODUCTION TO THE GALLERY**
Our collections come from all over the globe and are presented on two levels:
- On the 1st floor, the objects show the main line of evolution according to Gaudry.
- On the 2nd floor, invertebrates are displayed by zoological group.

**VERTEBRATE FOSSILS**
In the center, large skeletons provide an arresting image of vanished life, with the oldest specimens at the entrance and those of the first humans at the rear.

**To be discovered in side windows**
- **Quaternary era**
  - **Dolichocestus,** a large carnivorous dinosaur
  - **Compsognathus,** a small carnivorous dinosaur
  - **Archaeopteryx,** the first bird, 150 million years ago
  - **Dove,** a bird extinct since the 18th century

**Evolution of equines, the horse and its cousins**
- **Hippopotamus,** 10 million years ago, three-toed
- **Hippotæ,** 50,000 years ago, single-toed

**Proterozoic, origin and evolution of elephants**
- **Archaeotherium**, four-horned mastodon
- **Mammuthus primigenius,** the largest of the Proterozoic

**From the origin of primates to the emergence of Man**
- **Adapids,** an unlucky forerunner
- **Proconsul,** a key discovery
- **Lucy,** a possible ancestor

**NOTEWORTHY FOSSILS IN THE CENTRAL GROUP**
- **Cambrian era** (600 to 454 million years ago)
  - **Dunkleosteus,** enormous armored fish
  - **Eryops,** one of the first amphibians
  - **Pareiasaurus,** large primitive reptile
  - **Cephalaspis,** one of the first bony fish

- **Mesozoic era** (245 to 65 million years ago)
  - **Diplodocus,** herbivorous dinosaur of great length
  - **Tyrannosaurus,** terrible carnivorous dinosaur
  - **Iguanodon,** the famous dinosaur of Belgium
  - **Sarcosuchus,** giant crocodile
  - **Ichthyosaurus,** shark-like marine reptile

- **Tertiary era and Quaternary era** (65 million years ago to today)
  - **Megatherium,** enormous, slow-moving South American creature
  - **Glyptodon,** surprising South American mammal
  - **Megaceros,** enormous forest deer
  - **Smilodon,** saber-toothed cat

**INVERTEBRATE FOSSILS**
Small room: invertebrate fossils of Obigny’s collection.

**First fossils**
- **Fossilization**
- **Small room**

**Map**

**Gallery of Comparative Anatomy and Paleontology**