OSAKA MUSEUM OF NATURAL HISTORY



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Guide to Osaka Museum of Natural History

We have two buildings for exhibition. "Flower, Greenery and Nature Information Center" and "Main Building". In the Information Center, you can see exhibition "Natural History of Osaka" in the 1st floor and special exhibition in the 2nd floor. In the Main building, we have regular exhibition.

Natural History of Osaka (Information Center)



In this exhibition room, we exhibit the wonders of nature that can be seen in Osaka. It would be helpful for you to go out in nature while you stay in Kansai. Full of information about indigenous insects, trees, birds, animals, rocks of Osaka, as

Exhibition Rooms (Main building)

well as information about nature hike trails.

Story of Nature and Human Interaction

The regular exhibition is arranged according to the consistent story and represented by 27 themes ranging from the First to the Fourth Exhibition Rooms. We recommend that you look through the exhibitions in numerical order for better understanding.



Naumann Hall

The Prehistoric Nature and Dawn of Human Society in Osaka

It is still unclear precisely when human beings began to inhabit the Osaka area. However, stone implements have been excavated from thirty and several thousand years-old strata. At that time, Naumann's elephants and Yabe's giant deer roamed in herds in the



Osaka area as well as surrounding region. Humans of that age most likely survived by hunting these animals throughout the vast wilderness that existed here in Osaka at the time.

Early Human Activity and Impact on the Environment

Approximately 3,000 years ago during the Final Jomon Period, early humans began the cultivation of rice, moving from a hunter-gatherer based existence to an agrarian lifestyle. Eventually, with the passage from the Yayoi to Kofun Periods, the inhabitants of the area formed large communities and developed extensive paddy fields for rice cultivation. How did this activity affect the environment, and how did the environment respond?

Changies of Osaka through geographical maps.

1st Exhibition room - The Natural World Around Us-



What kind of environment are you living in now?

An urban environment greatly modified by man.

A rural environment of SATOYAMA shaped by the activity of both humans and a variety of plants and animals.

A pristine environment untouched by human hands. The environment around us can be roughly divided into these three stages.

While long and extensive human activity has significantly transformed the natural world, there are many creatures in nature that have adapted to the new environment and continue to thrive. Let us take a look at what kind creatures exist in the diverse environments of the Osaka area.

 $1.\ Invaders$ -- Invasion by exotic plants and animals - Alien animals introduced with logs; Seeds mixed with imported soybean

2.Urban nature

2A Wildlife in a park - Lifecycle of cicada; Brown-eared Bulbul, seasonal change of food-habit

2B Urban nature- Household insects; Medical insects around the house; Urban insects

3. Rural nature - Weeds and insects; Irrigation pond and the neighboring nature; Bamboo thicket $\,$

4. Nature of country forest (diorama)

5. Virgin forest of ancient Osaka (diorama)

6. Wild mammals of Osaka

7. Insects in the forests of Osaka - Insects of the evergreen oak forest, the deciduous oak forest, the pine forest, and the beech forest; Insects which have disappeared from Osaka 8. Foods of prehistoric man in Osaka

8A. Edible wild plants in Johnson age - Cultivated plants

8B. The shell mound of Morinomiya archaeological site

9. Riverbed nature of the Yodo-gawa - Fishes of riverside pools "Wando"; Animals in reed-bed

10. Life in Osaka Bay

10A. Water quality of Osaka Bay as indicated by barnacles

10B. Fishes commenting on the Osaka Bay

10C. Tidal flat in Osaka Bay (diorama)

2nd Exhibition room -History of the earth and life -



The Earth was formed approximately 4.6 billion years ago, and life appeared on the Earth about 3.8 billion years ago. Over the long history of our planet, it underwent many great changes, including continental drifts and changes in sea level, and the system of the Earth has developed.

Life has evolved in close connection with the Earth's history, and over this time a vast array of species have thrived as well as become extinct. Then the age of humans arrived. This exhibit begins from the formation of the Osaka Plain, and then traces back in time, the history of the islands of Japan, and the Earth, as well as the history of life itself

11. History of Osaka Plain in the last 20,000 years

11A. Fossil whales under the city

11B. History of Osaka Plain in the last 20,000 years

12. The Great Ice Age - Marshy spring flowers in the glacial age

13. The Quaternary Period

13A. The age of man - The Nojiri-ko Palaeolithic Culture; Palaeolithic tools of Kinki district

13B. The glacial age - Vegetation during the last glacial maximum

13C. The interglacial age and the ancient sea of Uemachi-Terrace

14. The Osaka Group

15. The age of mammals

15A. Tertiary flora - Plant fossils from the Japanses Tertiary sediments

15B. Aspects of the Miocene Inland Sea - Mollusks of the Miocene Inland Sea

15C. Nijo-san - Miocene volcano at the east of Osaka

15D. The age of mammals - The evolution of horse; Desmostylus; Eostegodon, etc.

15E. Green-tuff movement in Early Miocene age - Distribution of the volcanoes in Japan

15F. Japanese coal formed in the nummulitic period

16. Late Cretaceous fossils from the Izumi Mountains of Osaka

17. The age of dinosaurs and ammonites

17A. Aspects of the Mesozoic sea - Ammonites, their phylogeny, physiques, mode of life; Mesozoic sea animals

17B. Mesozoic land plants

17C. Dinosaurs and allied animals

18. Aspects of the Palaeozoic sea and forest

18A. Inhabitants of the Palaeozoic forest - Palaeozoic plants and amphibians

18B. Mammal-like reptiles

18C. Inhabitants of the Palaeozoic sea - The oldest fossil from Japan; Precambrian fossils, Trilobites, etc.



3rd Exhibition room - Evolution and the diversity of life -



The long history since the origin of life about 3.8 billion years ago has increased the diversity in the global biota. This great diversity of body plan and shapes is the result of evolution. Diversity is the key to solving the mystery of evolution. Let us step into the world of biodiversity.

19. Speciation

Fish speciation in Lake Biwa-ko - Three kinds of crusian carps; Three kinds of catfish. 20. Dispersal

20A. Migration of butterflies - Oversea dispersal of great eggflies; Seasonal migration of chestnut tigers; Mass flight of rice skippers

20B. Dispersal of seed plants

21. Coevolution

21A. Interactions between flowers and insects - Pollination

21B. Mimesis and mimicry of insects

22. Evolutionary diversity of insects - Adaptive radiation in beetles; Insects in various environments

23. Zoogeography of insects

24. Sea as the cradle of life

24A. Coral reef inhabited by various organisms

24B. Intertidal life

24C. Living fossils - Slit shells, Nautilus, Horse-shoe crabs

24D. Deep-sea animals

24E. Animal phylogeny

24F. Marine huge animals and seaweed

25. Whence come we?

25A. Backboned animals

25B. Mammalian skeletons and their function - Marsupials; Herbivores; Carnivores; Omnivorous carnivores; Apes and monkeys; Teeth of mammals

25C. Human skeletons

4th Exhibition room - The Gifts from Nature-



Humans of the early age, lived in seeking out edible plants among wild flora, and then tried to cultivate them. Humans started to have permanent fields and settlements, and production of crops had stabilized, leading the civilization. Diverse cultures has developed we now can see on our dining tables many kinds of vegetables and fruits originated from all around the world, that have been selectively improved by humans in long history. Nature has provided us with many other gifts besides that of food. Let's take a look at the gifts that nature has bestowed upon us in our daily life.

26. Food plants and their homes

26A. Food plants from the Mediterranean Region

26B. Food plants from the Savannah

26C. Food plants from Southeast Asia

26D. Food plants from China and Japan

26E. Food plants from the New World

27. Forest and man

Large wooden buildings in Japan; Plantation of conifer; Use of hard wood; Increased timber import; Conservation of forest

Gallery

Meteorite
Fossils from the Upper Cretaceous Izumi Group
Variety of Minerals
Shells of Biwa-ko and Yodo-gawa
Fauna and flora of Osaka Bay
Timber of Douglas-fir

Entrance Porch Exhibition



Fin whale stranded at Osaka Bay (19m in length)

Special Exhibition

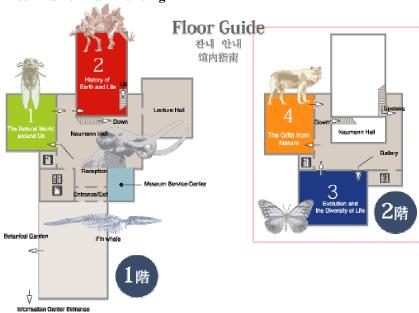
We have variety of exhibition about natural history, every year.

Usually held at the "Nature Hall" on the 2nd floor of Information Center. Extra fee required. In detail, see website

Information Counter

Available at Naumann Hall in the main building and Information Center (1st floor).

Floor Plan of Main Building



ACTIVITIES

Educational Activities

We have lots of outdoor activities, such as nature hiking, botanic tour and so on. Please ask at the Information counter.

Association of Osaka Museum of Natural History

Organized by approximately eighteen hundreds members. Membership fee - 3000 Yen a year at present. In detail, see website.

Publications

Bulletin, Occasional Papers, Special Publications, Guide for exhibition, Short guide, Guide for special exhibition, Leaflet (small guide for one subject), Annual Report

Museum Shop (located at Information Center)

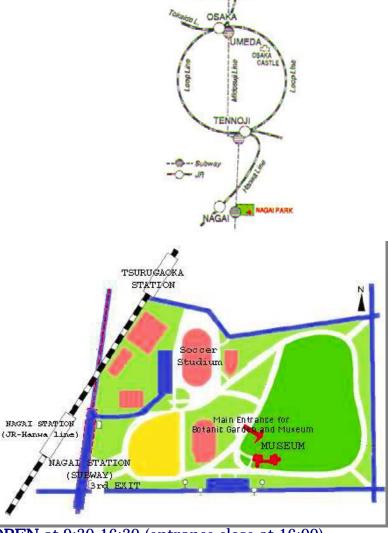
Natural History books, publications, observation tools, picture cards and many kinds of crafts for souvenirs are available.

For other activities including research and collection, see website.

http://www.mus-nh.city.osaka.jp/english/

How to get there

The museum is situated in the Botanical garden of Nagai Park, Higashi-sumiyoshi-ku. Getting off at "M26:Nagai" station of "Midosuji Line" (red line) by subway. Ten minutes walk toward the east. Or getting off at "Nagai" station of "JR-Hanwa Line". Thirteen minutes walk toward the east.



OPEN at 9:30-16:30 (entrance close at 16:00)

CLOSE on Monday (in case of holiday, close on the next day) and DEC.28 –JAN.4

ADMISSION: 300YEN for ADULT, 200YEN for STUDENT, FREE for CHILD under age15.