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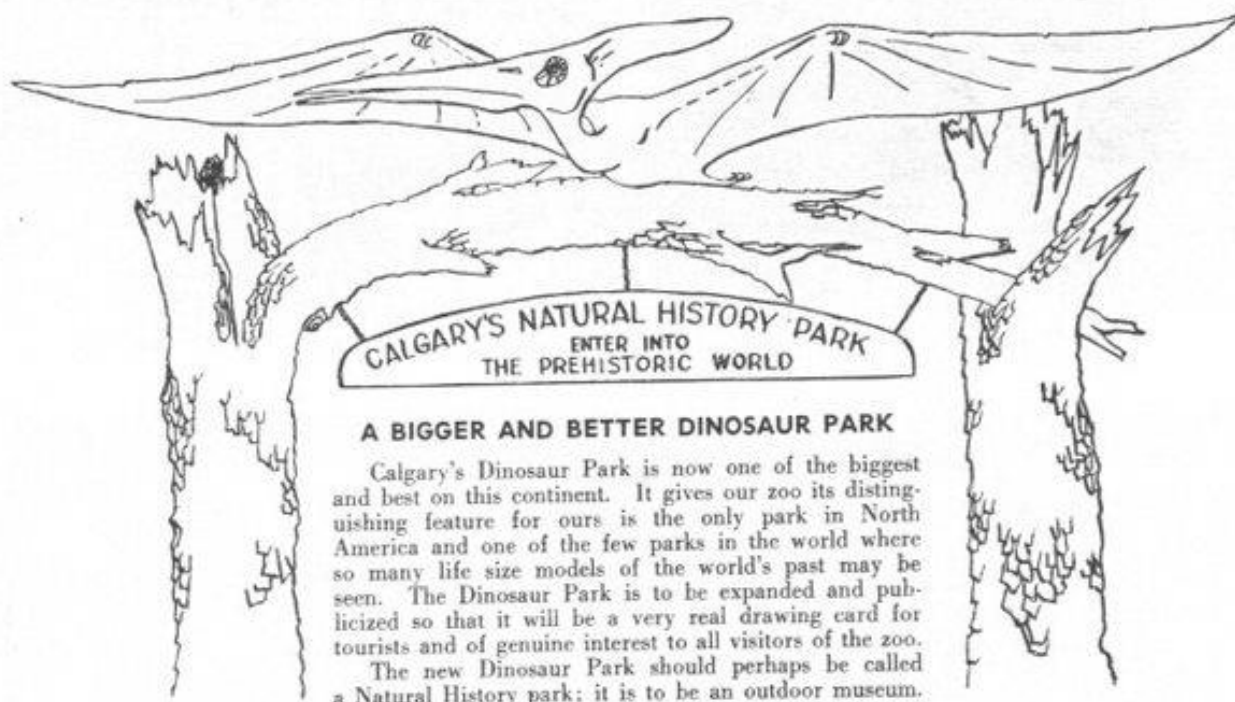
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Bringing Zoo News and Zoo Views to Zoo Lovers from Calgary Zoological Garden and Dinosaur Park

New Pteranodon gateway to the Natural History Park, Calgary Zoo.



A BIGGER AND BETTER DINOSAUR PARK

Calgary's Dinosaur Park is now one of the biggest and best on this continent. It gives our zoo its distinguishing feature for ours is the only park in North America and one of the few parks in the world where so many life size models of the world's past may be seen. The Dinosaur Park is to be expanded and publicized so that it will be a very real drawing card for tourists and of genuine interest to all visitors of the zoo.

The new Dinosaur Park should perhaps be called a Natural History park; it is to be an outdoor museum.

The new, impressive gate is placed so that it may be seen from a large part of the zoo proper. This gateway shows the largest of the flying reptiles, the Pteranodon. These reptiles lived during the Cretaceous period 90 million years ago, and some of them attained a wing-spread of as much as 27 feet. The remains of these animals have been found in western North America and in Europe showing that they had a wide geographic range.

After the visitor passes through the gateway, his steps will be channelled across the bridge where Fossil

House No. 2 now stands. In the future this fossil house will be enlarged to include large window displays of life as it appeared in each of the past geologic ages. The visitor will then walk down a path where he can see the animals displayed and arranged so as to show their development from one to the other and to show those that lived in co-existence.

As one walks down the path, he is progressing in time until, returning to the footbridge, he will have reached the end of the "Age of Dinosaurs". With easily read, explanatory signs,

these exhibits should be interesting, awesome, and informative so that everyone may see and understand a bit more of the fascinating story of life as it developed through the ages on the earth.

The more recent mammals will in the future be displayed in like sequence along paths around what is now Fossil House No. 1.

We believe that completion of projects now underway will result in an outdoor museum that is second to none and one that will make Calgaryans justifiably proud.

DINOSAUR FAMILY TREE

Each of these sub-orders is represented by one or more models in the Calgary Dinosaur Park

CERATOPSIANS (Horned Types)

plant eaters

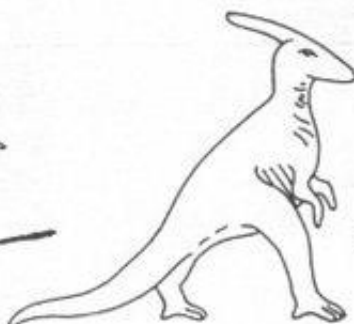


Triceratops
30 ft.

ORNITHOPODS

(Bird-footed types)

plant-eaters



Parasaurolophus
27 ft.

ANKYLOSAURS

(Armored bodies)

plant-eaters

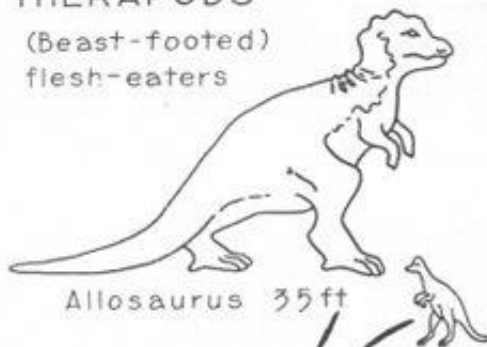


Ankylosaurus
9 ft.

THERAPODS

(Beast-footed)

flesh-eaters



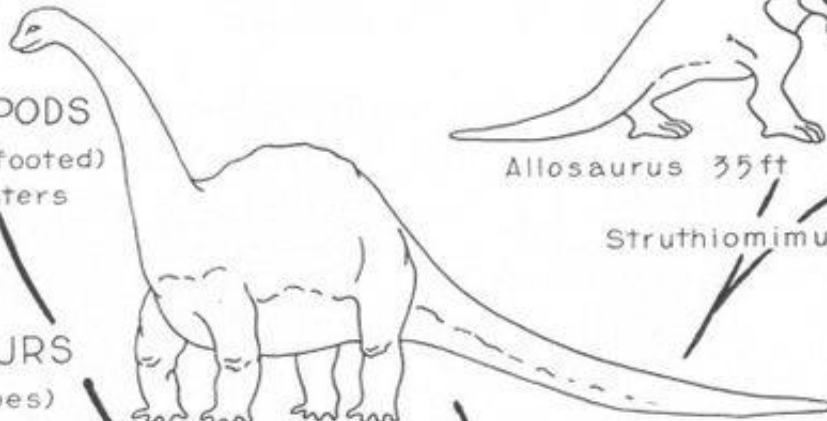
Allosaurus 35 ft.

Struthiomimus 6 ft.

SAUROPODS

(Lizard-footed)

plant-eaters

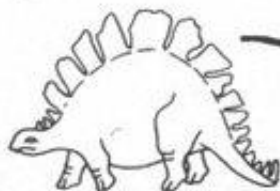


Brontosaurus
65 ft.

STEGOSAURS

(Plated Types)

plant-eaters



Stegosaurus
20 ft.

Ancestral THECODONT 6 ft.

THE DAYS OF THE DINOSAURS

Geologic processes require an immensity of time which would stagger the imagination if we could but grasp its meaning. How old is old? When was "long ago"? To a small child perhaps "long ago" was last week, to an adult it was the turn of the century, to an historian it might be in the days of ancient Greece. An archeologist measures time in the thousands of years; a geologist measures time in the millions of years. The dinosaurs lived during the Mesozoic Era—the middle history of the earth to a geologist. In years this Age of Dinosaurs began 200 million years ago. The Mesozoic Era and the dinosaurs lasted for some 140 million years.

Were we to look at a map of the world as it was during any of the time involved in the Mesozoic Era, we would fail to recognize most of the features. Continents which are widely separated now, were then linked together. The seas and topography were very different in extent and relief. Land life in the Mesozoic was abundant and varied, including insects, snails, birds, small mammals, and reptiles. This last group adapted themselves so well to life on land and in the sea and so overwhelmed all the rest in abundance, variety, and sheer size, that the era is well called the Age of Reptiles.

The reptiles were the first vertebrates to become free of the necessity of living in or very near water. This meant that they had the whole world to conquer, and this they did. It was a time of great change and rapid development so that each ecological niche was filled by one of the many forms of reptiles. The dinosaurs with their rapid locomotion soon were masters of the land. Many forms developed because they themselves were the hunters and the hunted. The beasts of prey were the THERAPODS (see chart) who were fast, strong, and had vicious teeth. The plant eaters, the grazers, found safety in either size, armoured covering, or ability to move fast or swim. The STEGOSAURS had armoured plates down the back and a spiked tail which they had no doubt used to good advantage. The SAUROPODS found safety in size, some reaching 85 feet in length, and the fact that they lived in shallow water and could no doubt retreat to greater depth if need be. The ANKYLOSAURS developed a body very low to the ground and completely covered with bony armour. The ORNITHOPODS re-

tained the two legged, swifter form of locomotion and some became real water dwellers with webbed feet and enlarged air chambers in the nasal passage. The CERATOPSIANS developed large bony shields over their head and neck and most had horns with which to confront the enemy. These animals dominated the lands and swamps of the earth for 140 million years with constant spreading into new habitats, increasing in diversification, and replacements of one group by another.

At the end of the Mesozoic Era all of the dinosaurs and most of the other of the many and varied types of reptiles became extinct. Whether it was climatic change, change in vegetation competition with the developing more active mammals, or a combination of these is one of the great mysteries of the ages. But evolution does not repeat itself and the Age of Reptiles was past.

TENTH ANNUAL MEETING, CANADIAN MUSEUMS ASSOCIATION Calgary, Alberta May 28 - June 1, 1957

The local Calgary committee of the Canadian Museums Association has been responsible of arranging the technical programme of the meeting. The theme for this convention is MUSEUM TRAINING in relation to Natural History and Zoology, Geology and Paleontology, Archaeology and History, and the Fine Arts.

Seminars for each of the above mentioned groups will be held simultaneously during the technical programme. At the end of the seminar sessions an open meeting will be conducted by each group chairman, reporting the findings of his seminar. Field trips to Banff museums and the Drumheller badlands have been arranged.

All Zoological Society members and others interested in Museum work are urged to register at the York Hotel, Calgary, on Tuesday, May 28, from 8:00 to 10:00 a.m. Advanced registration will be possible by contacting Mr. Archie Key, Coste House, Calgary. This is the first Canadian Museums Association annual meeting to be held west of Ontario. We, Calgarians in particular, must make every effort to justify their choice of this location. Copies of the programme will be mailed on request to members of the Calgary Zoological Society or any interested person.

WHAT IS A DINOSAUR

The dictionary defines a dinosaur as "Any of a group of extinct reptiles varying in length from 2 to 90 feet and having limbs adapted for progressing on land and a long tapering tail." And now, what is a "reptile"? For most of us the word reptile brings to mind snakes and unattractive and usually slow, sluggish creatures crawling in the swamps. The word "reptile" comes from the Latin word meaning "creeping" and today the common reptiles are the snakes, lizards, and crocodiles. It is difficult to conceive of a world which was populated almost wholly by reptiles. And it is difficult to realize that these reptiles dominated every sphere of life now filled by birds and mammals. In the air were the Pterodactyls, in the sea were many forms such as Ichthyosaurs and Plesiosaurs, and on the land were various forms of reptiles but chiefly the land was populated by the dinosaurs.

Dinosaur is not a scientific term in that it covers two complete and distinct orders of reptiles. In general the dinosaurs were the reptiles who were adapted to a running locomotion. Their bodies were carried up off the ground and their legs were under the body, not at the sides. One of the dinosaur's claims to distinction was his small brain. Stegosaurus (which we have modelled in our park) had the distinction of having the smallest brain cavity in proportion to its body size of any land vertebrate. Another, Triceratops (to be built), had the smallest brain cavity in proportion to the size of its head. The dinosaur no doubt had good reflex action, but their intelligence left much to be desired.

The ancestor to the dinosaur was a small reptile, lizard-like in appearance, which ran on the two hind limbs. The body was long, the limbs slender, the head elongate, and the jaws were armed with sharp, needle like teeth. From this ancestral Thecodont all of the dinosaurs evolved. They developed in many different ways; some became plant eaters, some remained meat eaters, some retained the two legged type of locomotion, others became so large or so heavy that all four legs were needed to support them. The accompanying diagram shows, to scale, an example of each of the basic sub-orders of dinosaurs. And shows the many and varied types of dinosaurs which evolved from the one common ancestor.

WHY BUILD A DINOSAUR

*I've never seen a purple cow,
I never hope to see one;
But I can tell you anyhow,
I'd rather see than be one.*
—Gillett Burgess

The restoration of the external appearance of an animal has little or no actual scientific value. However, the first question that most people ask about an extinct animal is "What did it look like when it was alive?"

The restoration of dinosaurs and other fossil animals is not just someone's imagination; the general shape and contours of the body can be determined quite accurately if the fossil bones of the animal are recovered. For instance, the shape and size of muscles can be reconstructed from the attachment surfaces on the bones. In some instances the entire body outline of the animal has been preserved as fossil evidence and in some instances the skin texture is preserved.

In all reconstructions the color is left to guess-work. However, the present helps to interpret the past and color in restorations is usually based on that of surviving relatives of the animal.

Mr. John Kanerva of Calgary is the builder of the reconstructed animals in our Natural History Park. He has built 39 life-size models of amphibians, reptiles, birds and mammals. They range in size from Brontosaurus which contains 120 tons of materials to Archeopteryx which is the size of a pigeon. They are all of steel and concrete construction and after twenty years and more the models remain structurally perfect.

NEW MODELS

Several new models have been added to the zoo group during the winter. In the autumn the new Pteranodon gateway was begun and will be completed as soon as the weather once again permits outdoor cement work. The other new models are all small enough to have been built indoors and then moved outside.

The new animals were chosen with the thought of building up the evolutionary story and most are the smaller "firsts" or ancestors to the larger animals already on exhibit.

Eryops (ER-ee-ops) reached the length of six feet and was a large amphibian of the order which gave rise to the reptiles. In Eryops the amphibians reached the climax of their development.



John Kanerva putting the finishing touches on Eryops, one of seven new models now under construction

Saltoposuchus (sal-to-po-SOOK-us) is the type of Thecodont reptile which gave rise to all of the dinosaurs.

Protosuchus (prot-o-SOOK-us) was the first true crocodile.

Cynognathus (sine-og-NATH-us) was about the size of a large dog and is typical of the mammal-like reptiles.

Nothosaurus (noth-o-SAWR-us) was the first of the reptiles to return to a life in the water. This animal was not completely aquatic as were some of the later reptiles.

Struthiomimus (strooth-ee-o-MIME-us) was a dinosaur about six feet tall with a very bird-like appearance. It is sometimes called the "ostrich dinosaur".

Rhamphorhynchus (ram-to-RINK-us) was a flying reptile with a wing spread of about four feet.

Archaeopteryx (ar-kee-OP-ter-ix) was the first bird and retained many reptilian features. This bird had many teeth and had a long reptile-like tail with feathers arranged on either side of it.

HERE AND THERE

To Brookfield went a Golden Eagle and in return we received a Genet and African Porcupine.

From Portland Oregon came Chin-chilla and Prairie Dogs.

Platinum Fox and Seagulls were sent to Memphis and a fine Wanderoo monkey came in return.

Lansing Michigan sent us a Capuchin monkey and some Canada Geese were sent in exchange.

A fine young Marten arrived from Revelstoke, B.C.

The Grand Rapids Zoo sent us a pair of Coati Mundi.

Platinum Fox were also sent to as far away as Jackson, Miss., Evansville, Ind., Fresno and Sacramento Calif., Portland, Oregon, and Memphis, Tenn.

A fine female Black wolf arrived from Detroit Zoo.

Lincoln Park, Chicago sent us Nutria.

THE HONKER

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