COLD STORAGE EXHIBITION SYSTEM OF THE MAMMOTH in the Aichi world exhibition

Adoption System • CO2/NH3 natural circulation system

Windless cooling system

(Drying prevention of Mammoth)

- -----

Outline of The 2005 World Exposition, Aichi, Japan F Exhibition that Loves the Earth J

Opening Period : from March 25, 2005 to September 25 Main Theme : Nature's Wisdom The exhibition presented such tackling and the need that defend earth

2

environment.

Participating Nation : 121 countries

Total Visitor's Number : 22,050,000 people

Introduction of a Yukagir Mammoth

1 . Excavation location

Yukagir village of the Russian Federation Sakha Republic

2 . Discovery progress

Discovery : In the autumn of 2002

Excavation completion : September, 2004

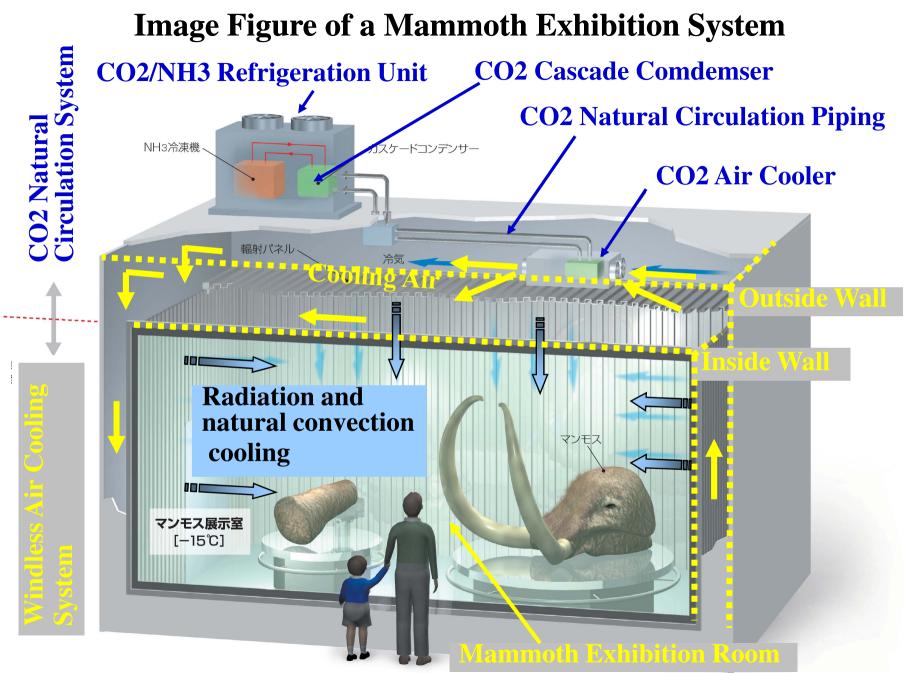
3 . Discovery part :

Head (with two tusks) , left foreleg, etc.

- **4** . Significance: in 100 the large discovery of once
- 5 Name: Yukagir Mammoth (named for the location where it was discovered)
 Death time : About 18,000 years ago Sex : Male

Mr. Yukagir Mammoth

Age : About 40 to 45 years **Shoulder height : Estimation 2.8 meters** Weight: Estimation 4 to 5 tons



CO2/NH3 Refrigeration Unit Specifications

- Refrigerating Capacity : 22kW
- Refrigerant : NH3 / Secondary Refrigerant : CO2
- Compressor (NH3) : Open Reciprocating type
- Condenser (NH3) : Evaporative type
- CO2 Cascade Condenser : Plate Heat Exchanger
- Unit Size : 2 wide by 3 meters long , 3 meters height



Mammoth Exhibition Room Specifications Size : 8 vide by 5 meters long , 3 meters height Temperature : -15°C Humidity : 75% RH

Glass window Inside : Enclosing of argon between the glass of 3 layers Outside : tempered glass and supply of drying air between inside glass **Significance that Displays the Mammoth**

Estimation cause of mammoth extinction

- ~ About 10,000 years ago extinction ~
- 1) Excessive catch theory of mankind
- 2) Change theory of earth environment

(Environment change

by sharp global warming of ice age later)

3) Sick theory by a harmful microorganism

The exhibition of the mammoth lets many person think about "the relation of nature with a person" and about "the change of earth environment".

