



Granby Zoo

Project Background

The Granby Zoo is one of Quebec's leading tourist attractions and Canada's oldest zoo. Over half a million visitors tour the zoo each year. Located in the town of Granby, east of Montreal, the zoo is home to around 1,000 animals from 200 different species.

The costs of operating the facility are enormous. Beginning in 2006 they undertook a significant renovation to update and modernize the entire property including their climate control systems. In addition, they have also incorporated LED lighting, solar energy, and attempted to reduce their use of natural gas.

Quick Facts

- **Location** - Granby, Quebec
- **Nordic Model** - W400
- **Unit Capacity** - 35 tons.
- **Units Installed** - 2
- **Total System Capacity** - 70 tons
- **Unit Type** - Water-to-water
- **Unit Functionality** - Water-to-water heating and cooling (reversible) and heat recovery
- **Awards** - Special Mention in the Canadian Geothermal Coalition's Excellence and Leadership awards in 2007



Geothermal Advantage

A huge consideration for the zoo when it was time to install a new system was the ability to provide consistent and comfortable temperatures for the animals. As the animals come from a variety of climates, including Africa, Asia and South America, ensuring the temperature in their enclosures mimicked their natural habitat was fundamental to the success of the project. Nordic® products were selected because they are designed for a range of climates making them the toughest and most reliable, and able to provide a stable climate for all of the animals.

As sustainability is a hugely important consideration for the zoo, they turned to the most eco-friendly energy source they could find - geothermal. Granby Zoo is a fantastic example of how beneficial it is for established businesses to undertake a retrofit of their existing infrastructure.

Nordic®'s commercial water-to-water heat pumps were installed in the enormous Elephant Pavilion, the Hippopotamus River, the Temple and the Ungulate Building. Sixty-five wells were drilled to accommodate the installation.

The Result

As a result of the move to geothermal, the zoo has reduced its greenhouse emissions by 21%, and slowed the increase in heating costs of maintaining the correct temperatures in the enclosures. The zoo now boasts reduced heating costs and substantially lower emissions, and has one of Canada's most extensive geothermal energy systems. Visitors now even come to the zoo to learn about sustainability.

For more on how Maritime Geothermal Ltd.'s Nordic® heat pumps can impact your property, call to **Speak with one of our experts** or **find your local dealer** today.