

News

FOR IMMEDIATE RELEASE
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FOR FURTHER INFORMATION
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**ST. LOUIS ZOO'S NEW ORTHWEIN ANIMAL NUTRITION CENTER WILL OFFER
STATE-OF-THE-ART EFFICIENCY, RESEARCH, CONSERVATION**

Zoo's new facility provides for top animal nutrition and groundbreaking research

With 17,900 mouths to feed each day, the St. Louis Zoo has a big job to do! Not only is food storage, preparation and delivery a huge commitment by the Zoo for its residents, but the need to develop customized diets for a diverse group of animals, ranging from American burying beetles to Asian elephants, is a huge challenge.

In a year's time, Zoo animals consume 10 tons of carrots, 20 tons of herring, 1,625,000 mealworms, 13,000 bales of hay, 1,000 cases of kale and 500 cases of bananas!

As the St. Louis Zoo begins operations in its new **William R. Orthwein, Jr. and Laura Rand Orthwein Animal Nutrition Center** on June 28, it will reach a milestone in the science of wildlife nutrition and research. Replacing an antiquated 50-year-old commissary, this 10,000-square-foot facility offers high-tech capabilities. There are four food preparation stations in a stainless steel kitchen, cold and dry storage, giant walk-in coolers and oversized cupboards and shelving, plus a loading dock for large packages - like 20 tons of herring!

The new building is located on the River's Edge path. Though the building is not open to the public, there is a large expanse of glass through which visitors can watch staff preparing food and conducting research throughout the day.

World Leader in Animal Nutrition

The Zoo's nutrition center includes a fully equipped laboratory for visiting and resident scientists to study the links between animal nutrition and a healthy environment, in zoos and in the wild. Researchers will be able to analyze appropriate diets using equipment such as a near-infrared spectrophotometer (for measuring water, protein, fat, minerals and other nutrients), a plant fiber analysis unit, and a high-performance liquid chromatography system (fat soluble vitamins A and E).

The nutrition center is also world headquarters to Zootrition®, a software database that helps zoo and wildlife managers around the globe maintain diet records, compare nutritional content of specific food items and calculate overall composition of diets relative to animal requirements. Zootrition® was developed by Ellen Dierenfeld, Ph.D., the St. Louis Zoo's staff nutritionist.

animal nutrition center
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Mary Ann Lee Animal Nutrition Kitchen

The Mary Ann Lee Animal Nutrition Kitchen will be a hub of activity each day. Starting at 5 a.m., the nutrition staff delivers 3,000 pounds of food to animal buildings throughout the grounds before the Zoo opens. Then during the work day, visitors can watch the nutrition staff through a bank of windows as they receive foodstuffs and prepare diets for the next day.

A 40 x 60-foot-long dry storage area accommodates bulk items, bagged feeds and pellets in more than 27,000 cubic feet of space. Three 4.5-ton two-story grain bins can be loaded through large chutes from outside the building. Climate and inventory controls give the Zoo new efficiency and economy.

A walk-in refrigerator measuring 40 x 16 feet supplies cooler space of 3,500 cubic feet to hold a large variety of fresh produce, as well as space for thawing frozen meats and fish and storing diets that are prepared for next day's delivery.

A 24,000 cubic foot freezer with a 17-foot-tall ceiling, about half the size of a basketball court, allows the Zoo to buy frozen meats and fish in bulk, saving money and improving operations. Many types of fish and seafood that make up the diets of sea lions, penguins and other animals can only be purchased during a brief period each year. The new freezer allows the Zoo to purchase these foods without renting off site freezer space. Also, the Zoo will bag and freeze "browse" (leaves and branches) trimmed from trees for feeding Zoo herbivores during winter months.

Public Gardens for Research, Education

Zoo visitors are also welcome to stroll through medicinal plant gardens, designed with help from the St. Louis Herb Society. Here visitors can see examples of plants that affect animal (and human!) reproduction, digestion, skin care, parasite control and general well-being.

There is also a plant research garden, supported by the Monsanto Fund. Larger plants in this garden will be used in Zoo research programs to study environmental, genetic and species diversity effects on nutrition. From these gardens, scientists will compare the nutritional values of cultivated fruits and vegetables with wild varieties, contrast nutrients in native prairie grasses with types of hay, research plants with toxins that plant-eaters are adapted to consume and study how various soil types, fertilizers, sunlight, or rainfall affect plants' nutrients.

First LEED Building at the St. Louis Zoo

While the Zoo has used sustainable design concepts in its construction over the past 10 years, the Orthwein Animal Nutrition Center is the Zoo's first building to comply with standards set for LEED (Leadership in Energy and Environmental Design) construction by the U.S. Green Building Council. The roof is a planted green meadow, and all landscaping is low maintenance.

animal nutrition center
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HVAC systems are high efficiency, with heat-recovery heating and cooling systems. Materials used in construction have high recycled content and are locally sourced. Part of the building is constructed underground for high insulation value.

Education Department's Exploration Outpost

On the lower level of the nutrition center is the Exploration Outpost, a new multi-purpose facility that is the first dedicated and fully-accessible space for Education classes and activities on Zoo grounds. The Outpost will be home to half the Zoo's session of the popular Camp KangaZoo for kids 6-15 years old and Wild Nights, an overnight program for families. During fall, winter and spring, activities will include childhood family programs, Snooze at the Zoo overnights for scouts and Wild Nights overnights for school groups. On fall and spring weekends, the Outpost will be the location for ZOOMagination Station, the Zoo's animal discovery room where children and their caregivers can find backyard wildlife, pretend to be a zoo vet or keeper, put on a puppet show about wildlife and discover the wonders of nature.

The estimated cost of the nutrition center is \$5.3 million, including site work and fees. Construction was made possible by leadership gifts from William R. Orthwein, Jr. and Laura Rand Orthwein Foundation, Mary Ann Lee, and other donors.

The architect of the nutrition center is Fox Architects. The general contractor is Hankins Construction Company.

The St. Louis Zoo has been named America's #1 Zoo by Zagat Survey and Parenting Magazine. Admission to the St. Louis Zoo is free. During summer months through September 3, 2007, the Zoo is open from 8 a.m. to 7 p.m. It will close at 5 p.m. on July 25 and August 22. For more information about the Zoo, visit www.stlzoo.org.

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