Farm (Sex) in the City

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It's often a big surprise to people that Minnesota is primarily an agricultural state. Visions of Mary Tyler Moore in the twin cities of Minneapolis and St. Paul are often the first image of our state. However, while about 90% of the state's population live in the Twin Cities, approximately 80,000 farms with 29 million acres of land lie outside the metro area. Each of these farms produces crops and livestock to feed about 128 people in the world (a statistic about an average Midwest farm). In 1790, 90 percent of Americans were farmers. Throughout the 19th and 20th centuries, that figure declined with Minnesota losing 100,000 farm people every decade.

Timbermen and farmers, pushing further west to secure rich earth and plentiful growth, founded Minnesota. Immigrant settlers included Germans, Finns, Swedes, Central Europeans, and, more recently, Amish and Mennonite. Others with financial resources settled the Twin Cities and provided the market and transportation systems to national customers for the state's farmers and timbermen. Many of these companies such as Pillsbury, General Mills, Northern Pacific Railroad, remain today.

In 1978, on an area known for its prime farmland, the Minnesota Zoo in Apple Valley was born. The Minnesota Zoo is located on 400 acres of land 15 minutes south of the greater metro area. The Zoo features exotic and endangered animals from all over the world, including many SSP breeding programs. Some SSP animals are Amur tigers, Clouded leopards, Malayan sunbears, White-Cheeked Gibbon, Japanese Macaque, Bali Mynah, Great Hornbill, Matschie's tree kangaroo, Mexican wolf, Asian wild horse, and Pygmy loris. Some native Minnesota animals, also featured, include moose, beaver, bald eagle, trumpeter swan, mountain lion, lynx, bison, pronghorn antelope, and wild turkey. Marine life is also featured in Discovery Bay, where our dolphin family performs and thrives.

In June of 2000, the Wells Fargo Family Farm opened as the newest area in the Zoo. The Farm was built on 8.5 acres on the western edge of the Minnesota Zoo. The purpose of the new attraction to the Zoo was to provide *a place where [a visitor] can become part of a community of people, plants and animals striving to maintain balance with nature*. In order to reach that goal, the Farm at the Zoo nurtures a caring attitude toward the local environment by:

Exploring environmental relationships in fun ways through self-guided discovery;

Interacting directly with animals and nature in a rural setting; and

Celebrating stewardship, adaptability to change, biological diversity, seasons and the cycle of life.

The Farm at the Zoo was built to recreate a way of life of a mid-20th century farm and to show how Minnesota agriculture has changed over the past 100 years. It tells a story of Minnesota agriculture past, present and future.

It contains a traditional red dairy barn with milking parlor and hayloft. Other farm buildings include a grain elevator, farmhouse, a granary, chicken house, swine bar, goat and sheep barn, and a machine shed. The buildings are designed for the efficiency of this working farm, its livestock and 1.2 million annual visitors.

The Farm at the Zoo houses traditional farm animals, including cows, horses, pigs, chickens, goats and sheep. More than ½ of them are rare and/or critically endangered breeds. The horses are endangered American Cream Draft Horses – less than 200 in existence. They are working horses on this Farm, plowing fields and hauling farm wagons. They also participate in parades around the area as ambassadors of the Minnesota Zoo. The American Creams represent the effects of changing technology over the past century and about current uses of draft horses in logging, agriculture and the carriage trade. The Farm is a working farm with breeding, milking,

births and deaths that are an everyday part of farm operations. Our farm staff works in all areas of the farm like real farmers – building fences, milking cows and shoeing the horses.

Reproduction is demonstrated in both the old fashion and artificial methods. The American Livestock Breeds Conservancy currently lists the Gloucestershire Old Spots (pigs) as a critically endangered rare breed. As part of the Farm at the Zoo, males and females share living quarters, allowing them to breed naturally, unlike the hog breeding programs of today. Sows deliver their litters of piglets during regular visitor hours. Several rare breeds of cows were also selected for the new farm, including red and white Holstein, Brown Swiss, Ayrshire and Guernsey. The cows are artificially inseminated at different times of the year, so calves are born throughout the year. Visitors are able to watch artificial insemination, as well as calves being born.

At specified times during the day, visitors can bottle-feed a calf, pet a newborn chick, feed a goat up close and personal, run their fingers through the wool of the Shetland sheep, feel the wet nose of a horse or cow, and pat a pig's hairy back. They can also watch cows being milked in the dairy parlor, listen to a demonstration of how the cow and milk are taken care of during the milking cycle, observe a horse being shoed, see eggs slowly cracking open in an incubator, gasp at the ferocity of piglets feeding from their mother, and enjoy a colt frolicking around its mother in the pasture.

The Farm in the Zoo becomes a teaching laboratory. There are generally 2 types of visitors who arrive. One type are farm families who live outside the urban areas who typically grew up on a farm, may still live on a farm, or have grandparents who own farms. They are comfortable in the "farm in the city" concept, often willing to share stories with volunteers, staff and other visitors about "how it was" or "how it is." They intimately understand the cycles of life (birth and death) that are a part of being a farmer.

Another type of visitor (very much in the majority) is an urban dweller who may or may not have had some farm experience generations ago, but who are now very far removed from farms. These visitors are fascinated by the animals that they always considered "ordinary" but have never approached. They absorb information like sponges, ask many fundamental questions, often state "old wives' tales" of things they've heard, and are curious about feeding, births, pregnancies, equipment, etc. Many of these visitors are children. They particularly are drawn to the baby animals, and possibly their "take home memories" consist of that week-old piglet, the fluffy chick, the wobbly calf, the frisky colt, and the leaping baby goats. These urban visitors are turned off by the pesky flies bothering the sow while she's feeding her babies, the use of a farrowing crate after the piglets are delivered to assure safety, a cow defecating in the milk parlor, or the fate of the chicks once they are 2 weeks of age. It becomes an interesting challenge for farm-trained volunteers to help visitors not to be "turned off" by the biology of farming and to understand the reasons and procedures why nursing sows cannot be sprayed with fly spray, farrowing crates prevent a sow from stepping or lying on her young, etc.

One of the most fascinating aspects for visitors to the Farm in the City is the emphasis on the "farm of the future" and the aspects of "future breeding" techniques. Remember that the Zoo Farm represents the Minnesota farm of the past, present and future. For example, animal breeding in the past was allowing animals "natural selection" by keeping them together during breeding seasons, and by the animal's choice of breeding partner. Today, because of the emphasis on quality of breeding stock and quality of food produced, the farmer makes the decision of breeding by introducing artificial insemination. Tomorrow's breeding may take place in laboratories with the newest technology – biotechnology and cloning. To introduce the concept to visitors (often new to both rural and urban visitors), the Minnesota Zoo has 3 cloned cattle as part of the farm collection. The cattle come from Infigen, Inc. in DeForest, Wisconsin – one of the world's leading biotech laboratories. Two Holstein dairy cows who are twin clones are on loan from Infigen. Much to the visitors' surprise, they look exactly like "regular" Holsteins. Infigen Inc. gave the Minnesota Zoo the world's first cloned bovine from a non-embryo-derived cell whose name is "Gene", a Holstein bull.

Cloning technology is moving closer to becoming a viable means of genetically tailoring herds of livestock, particularly dairy cattle. Not only can these animals be more efficient milk and meat producers, but also they

are considered to be excellent candidates as “walking pharmaceutical factories,” whose milk can be utilized for the production of difficult-to-produce pharmaceutical compounds.

Cloning can be controversial, and farm volunteers are expected to explain the processes, but not to make judgements. Visitors are also told that cloning technology is very expensive with a very high risk of failure, so that cloning will not be a part of farming for a while yet.

But the greatest challenge for farm volunteers is helping urban visitors understand the main service that farms play in our state and in the world. The concept of an income producing and food generating business is often a difficult one. Almost all people understand this from plant production, particularly since Minnesota is a leading producer of corn, soybeans and wheat. But, when farm-trained volunteers are asked: “What is going to happen to these chicks?” or “Where do you keep the baby pigs?”, the farm becomes a different kind of teaching lab. Many visitors have never allowed themselves to think about the connections of that juicy steak on the barbecue and that sweet little calf, the roast chicken last Sunday with that darling little chick, or last night’s porkchops with that adorable piglet.

Farm volunteers gently instruct, when asked, about baby pigs leaving the farm after weaning, being sold to “finishing” farms to gain maximum weight, and finally being butchered at a certain weight. Or, talk about the chicks that are humanely killed and become food for the raptors in the main (exotic) part of the Minnesota Zoo. Or, those calves are taken from their mothers within 24 hours so that the calves can remain healthy and the cow’s milk can be used for human consumption as quickly as possible. These are tough facts of life, sometimes not well received by the public, but an important part of their understanding the concept of farming.

It becomes very important for them to leave with the understanding that farms feed not only people in Minnesota, but people all over the world. And, that family farms are “endangered” in the state. Family farms in the state of Minnesota have decreased by 80%. It is imperative that people develop an understanding of American agriculture’s contributions to society. The Wells Fargo Family Farm provides an important connection between our agricultural roots and our current society.

Today, about 2.1 million farms dot America’s landscape. Just 60 years ago, nearly 7 million farms produced food and fiber for the world. Despite the shrinking agricultural community, this nation’s farmers and ranchers are counted on more than ever to help feed, clothe and shelter an ever-growing world population. Farmers and ranchers provide Americans with an abundant supply of safe, high quality food. Our farm communities provide a quality of life for American consumers that is the envy of the world.