



Down to Earth: Reports from the field

Innovative Small Farmers' Outreach Program (ISFOP): West Central Region

Thinking Spring: Preparing and Caring for Newborns

by Susan Jaster and Jeff Yearington



Newborn cow calf
(photo from the American Dairymen magazine)

Spring can be a wonderful season as nature blooms into a new year of production. As we all wait to welcome spring, the livestock farmers should also prepare themselves for the arrival of offspring. The birthing season should mean 'welcome to the world' and an increase in your flock or herd size. As long as you have the proper equipment and a clean, comfortable location ready, you should be able to provide proper care for newborns.

In preparing for newborns, take time to check all of your birthing or obstetric (OB) equipment and supplies, and make sure you will have them on hand when you will need them. Three o'clock in the morning is not a good time to discover that something is missing from your OB kit. And if it becomes necessary for you to call a veterinarian, and he/she happens to be busy on another call, your OB kit will come as a big comfort. We suggest you build your own OB kit with these items: OB gloves, OB lubricant, disinfectants, antiseptics, clean towels, blankets, sterilized needles and syringes, surgical clamps, navel care products, suture materials and so on.

Taking care of the newborn is the next step. Keeping a newborn animal at a constant temperature and *(continued on page 3)*

In The Spotlight: Karbaumer Farm

A CSA powered by a Nebraskan, a Bavarian, 3 Belgians and a Haflinger

By Jim Pierce

There sits a small 20-acre parcel of land in northern Platte County just on the north side of the black-top. As you pull into the driveway you see two long full rows of colorful zinnias on each side and a series of small garden plots nearby. The drive circles around in front of the 'keeping house' where you will find eggs, potatoes, green beans, tomatoes and all sorts of seasonal produce for "Farm Table" Community Supported Agriculture (CSA) members. Welcome to Karbaumer Farm operated by Klaus and LeAnn Karbaumer, unconventional farmers with a philosophy of living that includes farming sustainably and sharing what they know and grow.

Klaus grew up in south East Germany in the state of Bavaria where he taught history and geography and trained educators at the post-graduate level. When he came to the US he also taught while adding more and more farming into his life. *(continued on page 2)*



Klaus Karbaumer puts the team in gear as he heads out of the barn and over to hitch up the plow.

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Karbaumer Farm *(continued from page 1)*

He will tell you he has owned and worked with draft horses for about half a century.

LeAnn grew up on a Nebraskan farm that was diversified with pigs, chickens, milk cows and row crops. She earned two Master's degrees as she pursued a career in psychiatric social work in the city. Dreaming of a milk cow and making butter she bought a farm west of Platte City. As she was planning a horse-drawn wagon ride for a family visit, she met Klaus. Together, their passion to serve as stewards of the soil along with the desire to utilize horses as an economically profitable farm model led to Karbaumer Farm CSA.

The CSA sells half and full shares of the farm's harvest. They produce nearly 10,000 pounds of food a year from 50 crops on several large gardens equaling approximately 2 acres. Nearly no off farm inputs are used.

The exception is the feed for the chickens, which currently is wheat purchased from a local steam power club, and seed for the crops. Klaus also has permission to glean the corn left in the neighboring fields after harvest which is then fed to his horses.

There is always something growing on some part of the farm whether it is an income producing cover crop or a planned vegetable crop. There are also two hoop houses, one is moveable and the other is a stationary structure where they get a jump start on the season to produce early and late crops for members.

The horses are used rather than a tractor as they are renewable energy source with a small carbon footprint and arguably more sustainable. They are used for plowing, disking, mowing, logging, cutting hay, spreading manure and giving wagon rides.

On harvest day Lee and Klaus slip into step with each other like a good team of horses as they get ready for their member pickup. Heading out the door Klaus turns to the field picking and hauling produce to the keeping house where Lee is packing the harvest into shares as well as helping pick. Each week when the shares are divided equally be-

tween all of the members, the total harvest contains anything from beets to zucchini.

Some of the other unique features of the Farm Table CSA are:

- Families can opt into the 'Rows to Grow' where together they can plant, care for, harvest and learn together about the food they eat in their own 8 foot by 8 foot plot of vegetables with a little direction from Lee and Klaus
- U-pick cottage flowers
- Green Tomato Challenge: where members can glean the tomato fields before they are tilled under and do creative cooking and preservation techniques with them
- Mulberry Sheet Shake-where members bring their own sheet and shake a tree for a pile of tasty mulberries
- The use of juicing and preservation (dehydrator, canning) equipment loan
- Access to books and videos related to sustainable farming and gardening, and the food system
- Invitation to the many farm events including Eaters (yes, Eaters) Egg Hunt, First Gathering, Harvest Celebration, Potato Harvest with a band, bonfire, and horse-drawn wagon or buggy rides
- Scything lessons
- Newsletters
- Pond fishing privileges.

To find out more information on their farm go to: www.karbaumerfarm.com

A vegetable garden at the Karbaumer Farm for CSA pickup day.



Meet ISFOP Staff member: Katie Nixon

ISFOP in the West Central Region started the day Katie Nixon was hired in March 2009. Ever since that day she has been working hard to get the program off the ground and working for the small farmers of this region.

After receiving her degree from Western Washington University in 2001, Nixon spent the next ten years studying and working in various countries around the world learning about sustainable food production and distribution.

She brings a wealth of knowledge about diversified food production systems, her biggest area of expertise being in urban food production. Urban



Katie Nixon driving in the posts for a high tunnel at an urban farm located in Kansas City, Missouri.

Agriculture has become a large focus in cities across the country and Kansas City is no exception.

Nixon works with a diverse range of city dwellers, from people wanting to have home gardens that help them provide fresh affordable food to their families, to communities wanting a shared garden or community garden, to individuals or groups wanting to start their own agricultural business enterprises. She is very happy to be working for the betterment of Kansas City's local food system and Missouri small farming.



Kid gets assistance with its first drink.
(Photo from Fias Co Farm.)

dry are keys to ensuring survival. Even more important is to be sure a newborn mammal receives the very first mother's milk, called colostrum. Colostrum provides immunity to the newborn to survive in the environment in which it is born. The easiest way for the newborn to receive colostrum is to get this directly from the mother. However, if the baby is too weak or the mother will not accept her young, then you may have little choice but to milk colostrum from the mother and bottle feed the baby. You may refrigerate the excess colostrum for later use. You will need to warm the colostrum before feeding this to the baby. Never use a microwave to warm colos-

Thinking Spring (continued from page 1)

trum. It is best to float the feeding bottle containing colostrum in a bucket of warm water before feeding the baby. Make sure the bottle and the nipples are properly washed, sanitized and stored in a clean place. Colostrum replacement products are available in the market, but getting it from the mother is the best and most cost effective.

You may want to prepare a warm place for the newborns. A warming station can be constructed from a clean 55-gallon barrel and a common heat lamp. Cut a big enough hole on the side so that the lamb or the kid can easily enter and exit. Leave a two to three inch lip so that it will have to step into the upright barrel. Drill some small venting holes at the top along with a hole for the lamp. Keep the electrical cord well out of the way. Calves will often need to be warmed, especially after a difficult birth. If you don't have a stall in a barn, make a pen from straw or hay bales, or even a couple of tarps. Use a heat lamp, if possible, placed 36 inches above the animal to prevent burns and

overheating, and to avoid the risk of catching fire. Cover the calf with a blanket or dry straw to maintain body heat.

Another way to prepare for the spring is to develop green pastures for the animals to graze. You can improve your pasture by simply spreading a mixture of grass-legume seeds using your usual methods. Frost seeding allows seeds to move with the melted precipitation and put these in contact with soil and moisture, thus putting these in ideal situation to sprout when the temperature warms up. If green pastures increase milk production, and if milk makes strong healthy babies, then you should end up with a good looking herd by early summer.

To find additional information, go to <http://attra.ncat.org/publication.html#livestock>, click the search button, and then type in 'birthing' into the box and hit the 'submit' button. If you have questions about birthing livestock, check with your local veterinarian or call a Lincoln University Cooperative Extension (LUCE) Farm Outreach Worker (FOW). Their contact numbers are listed on page 4.

Edamame: A soybean by another name!

One of the joys of being a Small FOW is the opportunity to learn new things each day. For some, edamame is an established food source, for others it is a new source of protein. Well known in Asia, it has been a major dietary component for over 2,000 years. We know this vegetable as the soybean. However, there are slight variations that make this conventional crop appealing as a snack or vegetable dish. The name edamame translates to "beans on branches."

For those who grow soybeans as a row crop each year, it is an established fact that the moisture content plays a key role on the quality of the finished product. Beans in storage will mold if the moisture content is too high at harvest. However, the soybean selected for edamame production is actually picked while still green. The pods are harvested, boiled in salt water and eaten by popping them out of the pod.

There are specific varieties that lend

themselves to soybean production for use as edamame. Some favorites are MidorivGiant, Mojo Green, Lanco, Bellesoy and Korean Black. Each variety is known for specific attributes such as disease resistance, temperate zones and productivity. In addition to edamame, these versatile legumes can also be used as tofu or processed for soy milk. And, reportedly, soybeans are easy to grow for the home gardener or small producer.

David Fairchild, noted horticulturist and plant explorer with the US Department of Agriculture (USDA), introduced edamame to the US in 1902 after delighting in its flavor and texture while traveling in Japan. He grew it and served it to prominent guests in Washington D.C. Although edamame did not catch on as a snack food as quickly as he had hoped, research has been going on for 75 years, flourishing in the 1930s and 1940s due to a protein shortage. Interest spiked again in the 1970s, concurrent with the growing interest in organic agriculture.

The focus of the Rodale Research Center was on edamame quality and adaptability, while Cornell University conducted basic agronomic research, according to the National Garden Bureau.

*NOTE: In our next issue of **Reports from the Field** will be an interview with a Missouri producer who has found her niche in the production of edamame. When this innovative farmer first enjoyed this vegetable it was found to be in short supply. So, the old adage 'find a need and fill it' has become her mantra.*



Image from www.seapointsfarm.com

ISFOP



If you are a small farmer and need information, please contact an ISFOP Farm Outreach Worker (FOW). FOWs live and work in your community. They can provide information on ways to better manage your resources, reduce expense and increase income. They can also provide information on other programs and resources that may increase your income and the overall quality of life for your family.

You are eligible to participate if:

- Your family lives on a farm, rural or urban
- Farm products or income from the farm are necessary for you to live where you do
- Your family provides the management and most of the labor for your farm
- Your total annual family income is less than \$50,000

Fishy Opportunity

by Jim Pierce

Americans have increased their consumption of fish to 17 pounds of fish annually per capita. That creates demand for a healthy, low calorie, low cholesterol, high in protein and sustainably raised fish. The increased consumption is depleting many wild fish populations. Polluted freshwater bodies are reducing the fish available for consumption. The increase in demand and declining wild fish populations has produced an opportunity for farm raised fish. Currently about 25 percent of fish consumed are farm raised.

The definition of aquaculture is the raising of aquatic organisms, both plant and animal, especially for food. This can be done by tank culture or pond culture, depending on the small farmers' assets. The water quality is the most important factor in the production of fish. Though the predominant fin fish for tank culture is tilapia, which is a bland, fast growing, disease-resistant species, it is suggested the new fish farmer start with ornamental aquarium species on a small scale for pet store sales.



How to Contact West Central Regional ISFOP Farm Outreach Workers:

- **Katie Nixon**, West Central Region Coordinator and Jackson County
NixonK@LincolnU.edu
(816) 809-5074
- **Jeff Yearington**, Cass and Johnson Counties
YearingtonJ@LincolnU.edu
(816) 779-6762
- **Susan Jaster**, Lafayette and Ray Counties
JasterS@LincolnU.edu
(816) 589-4725
- **Jim Pierce**, Clay and Platte Counties
PierceJ@LincolnU.edu
(660) 232-1096

In considering raising fish, begin by thinking about resources you have available. You can find many informational resources at Lincoln University (LU). Research is being done at LU's George Washington Carver and Alan T. Busby farms on re-circulating tank and pond culture production systems, nutrition of several species and reproductive behavior. Some of the web resources to begin with in determining whether aquaculture might fit into your farm plans are:

- LU Aquaculture, research and specialist: <http://www.lincolnu.edu/pages/3233.asp>
- Missouri Department of Agriculture, Aquaculture: www.mda.mo.gov/abd/aqua
- Missouri Aquaculture Association: www.moaquaculture.org
- North Central Regional Aquaculture Center: www.ncrac.org
- Aquaculture Hub: www.aquaculturehub.org

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ISFOP Program Campus Staff

- ◆ Dr. K.B. Paul, ISFOP Director
- ◆ Dr. Sanjun Gu, Associate Program Director and State Horticulture Specialist
- ◆ Vonna Kesel, Program Secretary

Publications are available upon request. Contact Pamela Donner, Media Center Coordinator at: DonnerPJ@LincolnU.edu

Upcoming Events

- **Annie's Project:** January 26-February 16, on Wednesdays, 6 p.m.-9 p.m. Higginsville, Missouri. Contact: WiegelW@missouri.edu
 - **Grow Your Farm:** January 26-May 4, every other Wednesday, 6 p.m.-9 p.m. North Kansas City, Missouri. Contact: NixonK@LincolnU.edu
 - **Missouri Organic Association Conference:** February 10-12. Go to www.missouriorganic.org for more details.
 - **Grafting Workshops:** TBA in February, Cass and Platte county. Contact: YearingtonJ@LincolnU.edu
 - **Pruning Workshops:**
 - * March 4. 1 p.m.-5 p.m. Focus is on berries.
 - * March 5. 9 a.m.-1 p.m. Focus is on fruit trees.
- Kansas City Area (specific location TBA). Contact: NixonK@LincolnU.edu