

# The Weekend Farmer

e-Newsletter for Small Farm Producers in Southwest Wisconsin

A University of Wisconsin - Cooperative Extension Newsletter

Winter 2006/07

Southwest Wisconsin Extension Offices:

# **CRAWFORD COUNTY**

225 N. Beaumont, Suite 240 Prairie du Chien, WI 53821-1995 Phone: 608-326-0223

# **GRANT COUNTY**

916 E Elm Street PO Box 31 Lancaster, WI 53813-0031 Phone: 608-723-2125

IOWA COUNTY

222 N Iowa St, Ste 1 Dodgeville WI 53533 Phone: 608-935-0391

#### LAFAYETTE COUNTY

627 Washington Street Darlington, WI 53530-1396

# RICHLAND COUNTY

1100 Hwy 14 West Richland Center, WI 53581-1398 Phone: 608-647-6148

# SAUK COUNTY

505 Broadway Baraboo, WI 53913-2404 Phone: 608-355-3250

#### VERNON COUNTY

E7410 County Hwy BB, Suite 392 Viroqua, WI 54665-0392 Phone: 608-637-5276



# In This Issue:



#### **Livestock Lessons:**

# It's Cold Outside! Tips for Winter Livestock Care -

Rhonda Gildersleeve - Agriculture Agent, Iowa County UWEX. A brief guide of animal requirements for water, housing, and feeding.

<u>Keeping Your Place Bio-secure</u> - *Adam Hady – Agriculture Agent, Richland County UWEX.* Five simple steps to keeping your animals healthy and safe from disease.



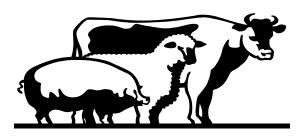
# HORTICULTURE HINTS

<u>Family Fun in Maple Syrup</u> – *Adam Hady* – *Agriculture Agent, Richland County UWEX.* From the trees to topping your pancakes, get an overview of the maple syrup making procedure.



# Money & Markets

<u>Developing Your Farm's Marketing Plan</u> - Rose Skora - Community Agriculture Educator, Kenosha and Racine Counties UWEX Excerpt from her full publication on the basics of building a marketing plan.



# **Livestock Lessons**

# It's Cold Outside! Tips for Winter Livestock Care

Rhonda Gildersleeve Agriculture Agent Iowa County UW Extension

Care for livestock in cold climates like Wisconsin requires some attention to those basic needs for water, food, and shelter as your animals cope with the additional physical stress that winter weather brings us all. While most animals are very well adapted to handle cold weather, ensuring that they have adequate water, appropriate feed amounts and some shelter from wind, cold rains or wet snow will ensure that your animals handle winter conditions with no ill effects. Keep in mind that very young, sick or very old animals may require even more attention to their special care needs.

#### Water

Water is the first essential nutrient and adequate water intake is just as critical in winter as it is in hot weather. Water is needed for proper digestion and utilization of feed nutrients, especially of fibers, which are a source of heat as digestion occurs. While animals can and do eat snow, this is not recommended as a sole water source, especially in extremely cold conditions. To ensure adequate intake, water should be above 40° F., so some type of heated system is recommended and available free choice through an automatic watering system or several times per day if watered manually. Water consumption varies based on temperature, size of animal, feed intake and production status. Table 1 lists estimated water needs for various livestock.

Table 1 Basic Livestock Needs for Water and Shelter

| Species | Water Needs, | Resting Space             |
|---------|--------------|---------------------------|
|         | Gallons/day* | Needs,                    |
|         |              | Ft <sup>2</sup> per adult |
|         |              | animal                    |
| Cattle  | 7-12         | 50 - 80                   |
| Goats   | 1-4          | 10                        |
| Hogs    | 6-8          | 8-16                      |
| Horses  | 8-12         | 80                        |
| Llamas  | 2-5          | 12-20                     |
| Poultry | Up to 1      | 3-8                       |
| Rabbits | Up to 1      | 3-8                       |
| Sheep   | 1-4          | 8-12                      |

<sup>\*</sup>Lactating animals will require even more water than estimated here.

#### Shelter

Protection from wind, cold rains and wet snow conditions is a second requirement. This may be provided by natural barriers/windbreaks or buildings and can be relatively low cost. If housing is provided, the building available should provide adequate space for multiple animals to lie down without being trampled or disturbed. Table 1 lists recommended resting space needs for various livestock. Where bedding is provided (indoors or outside), make sure it is kept as clean and dry as possible. Buildings should be designed with adequate natural and/or artificial ventilation to handle the animals housed to prevent health issues due to moisture, vapors or drafts. Access to the outdoors is desirable as most livestock will choose to be outside during all but the most inclement weather during the winter. Animals that are primarily kept indoors will not develop as heavy a winter coat and may need more protection than those that spend most of their time outdoors.

Small animals such as rabbits or poultry may need supplemental heat or protection, as will very young animals to prevent too much heat loss and even frostbite. Any animal that is shivering needs additional warmth, but very hypothermic (cold) animals will often stop shivering and need immediate attention. Avoid large temperature changes (from very cold to very warm) as these conditions can cause pneumonia.

# Feeding



Of course, animals should always receive proper feed adjusted for

their production needs, but in winter, it is especially critical to have adequate amounts available and replaced on a regular schedule, since food is the "fuel" that keeps the metabolic fires going. In addition to having adequate feed available, make sure that there is sufficient access to feed for all animals so that younger or more timid animals do not get forced away from their rations.

For livestock that primarily eat forages, extra rations of grain are less effective than having a sufficient supply of good quality forages such as alfalfa or grass hay available at all times, since fiber digestion produces body heat for these types of livestock. If animals are cleaning up everything quickly after feeding and have nothing to munch on until the next meal, you may not be putting enough forage out at a time to meet their extra needs during very cold weather. Inventory your forages and make sure you have some extra amounts of higher quality forages available for those cold snaps that may last several days to supplement your regular feed rations.

Part of your overall autumn small farm management plans should also include making sure that your animals are prepared for winter conditions by having them in good body condition prior to cold weather through proper feeding in late summer through fall. Assessing your winter feed and shelter needs should also be done before winter weather settles over Wisconsin to ensure that your animals will be comfortable, well-fed and healthy. If you need more specific information or ideas on preparing your livestock and farm for winter, please contact your local county extension office.

# **Keeping Your Place Bio-secure**

Adam Hady Agriculture Agent Richland County UWEX

Biosecurity is a word that we hear a lot from veterinarians and governmental agencies. But what is biosecurity and is it something that you should be worried about? Well, this is how I view biosecurity; it is taking measures to prevent the transfer of diseases from place to place and animal to animal.

So what does that mean?? It means that we do what we can to keep our animals healthy. We routinely practice some forms of biosecurity, such as cleaning out feeders or water tanks. However, we don't often think of all the ways that disease can be spread from farm to farm. Follow these five easy steps to biosecurity to keep your animals healthy.

- 1. *Keep Your Distance* limit the traffic through your animals and know who is there. Also allow for "clean" areas between animal groups.
- 2. Keep It Clean Don't drag debris and other unwanted diseases to your animals. Clean and wash your clothes and footwear, especially if you have been visiting another farm.
- 3. Don't Haul Disease Home if you are taking your animal to show, an area where many animals are brought together, or you are purchasing a new animal, keep them separate from the rest of the animals. You don't know what they might have picked up.
- 4. Don't Borrow Disease Sharing equipment is one way to spread disease. If you share with the neighbor, make sure that the equipment has been disinfected when you get it and when you send it back.
- 5. *Be Informed* learning what diseases look like and how they are spread is an important step to biosecurity.

Following these simple steps and using good common sense, you and your animals will share a healthy relationship.



# Family Fun in Maple Syrup

Adam Hady Agriculture Agent Richland County UWEX

Do you have maple trees on your property? Do you like maple syrup on your pancakes or waffles? Looking for a late winter family activity? If you said yes to these questions then small production of maple syrup could be for you.

The first step to starting your maple syrup hobby is to identify trees that are of course, maple trees. However, identifying the type of maple is more important. There are 13 species of maple trees native to the United States. For syrup making, two are preferred. The first is the sugar maple, and the second is the black maple. These two are preferred because the sap is sweeter than the other maples. The other common maples to the area are red maple and silver maple.

Once the maple trees are found, the next step is to determine the number of tapholes. Measuring the diameter of the trunk at about 4 ½ feet above the ground will give you an estimate of the number of tapholes the tree can accommodate. This is important because we want to keep the tree healthy throughout the process so that we can harvest sap in future years.

Figure 1

| Diameter of the tree<br>trunk at 4 ½ feet | Number of tapholes |
|---|--------------------|
| Less than 10"                             | None               |
| 10"-14"                                   | 1                  |
| 15"-19"                                   | 2                  |
| 20"-24"                                   | 3                  |
| 24" +                                     | 4                  |

Now that you have determined the trees that you want to tap and the number of tapholes per tree, it is time to insert the tap. Start by taking a drill and bore a hole into the tree with a slight upward angle into the trunk. This allows the sap to run freely and not collect into the tap. Drill the tap holes about  $1\frac{1}{2} - 3$ " deep. You want to drill only into healthy light colored sap wood.

Next, the collecting spout or spile is inserted into the taphole and tapped lightly to seat the spile. Collection buckets or bags are hung on the spile. If using a bucket, make sure that it has a lid to keep water and debris from getting into the bucket.

Sap flow becomes the next task. The flow depends upon the weather and is not always constant. A thermometer will signal to you when the sap will run. Sap runs when the night time temperatures fall below freezing and day time temps are above freezing. There will be days when you will not get any sap and days where you will get a gallon. Sap should be collected often for the highest quality syrup.

Now that the sap has been collected, it is time to make the syrup. This is done through boiling the water from the sap, which is a long and steady process. It takes approximately 43 gallons of sap to make 1 gallon of syrup. Pour sap into a pan. Use a pan that is at least 6-8" in height and start boiling. Do not fill the pan completely full or the sap will boil over. As the sap boils down, you will need to add more sap. Keep approximately 1 ½" of sap in the pan. Keep a close eye on the heat source, so that you do not scorch the syrup. As the density of your liquid increases, the chance of scorching also increases.

Finishing the syrup is dependant on the sugar content of the solution. As you boil the water the off, the percent of sugar increases. Because you have more sugar in solution, the boiling point increases. When the boiling point gets to 7.1°F above the boiling point of

water, you have syrup. This temperature is very critical to producing quality syrup that will store well.

The final step is bottling or canning the syrup. Run the hot syrup solution through a filter to remove sediment such as sugar sand. Place the syrup in clean bottles and seal at a temperature of at least 180°F to insure sterilization.

You are now ready to enjoy your pancakes or waffles at the family breakfast table with a product that you and you family can take pride in.

For more in depth information on the process of making maple syrup:

- Focus on Food Safety When Making Maple <u>Syrup</u> By: Barbara Ingham, Extension Food Scientist, University of Wisconsin-Madison
- Wisconsin Maple Syrup Producers Association online at: http://www.wismaple.org/
- North American Maple Syrup Producers Manual online at: <a href="http://ohioline.osu.edu/b856/">http://ohioline.osu.edu/b856/</a>





# DEVELOPING YOUR FARM'S MARKETING PLAN

Adapted from: <u>Developing Your Farms' Marketing Plan</u>, By Rose Skora, Kenosha & Racine UWEX

One of the challenges that direct marketing farmers face is determining the target market. What does your customer look like? Where do they live? And probably most importantly and the most difficult to answer is... What do they want?

While there are examples of "If you grow it, they will come", most farmers have to do some research to determine who, what, where, when and why of marketing your products. As important as it is to understand who your potential customer is, it is just as important to get to know your competition. The research doesn't have to be complicated, but it will pay off in the long run if you take the time to do the research and develop a marketing plan.

Additionally, a marketing plan is an integral part of developing a business plan. While a business plan is important to help determine the direction of the business, it is also a key component in seeking out and successfully receiving loans from lending institutions.

# **Keys to Developing the Marketing Plan**

# The Customer

Studies have shown that the "stereotypical customer" that buys directly from farmers is more affluent, highly educated, and predominantly female. So, there it is in a nutshell – if you go after the educated woman with an above average salary, you'll have your target customer. If it only was that easy!



You will want to spend some time asking yourself the following questions about your product(s):

- Who is likely to buy my product/service?
- Where does that customer live?
- Is there an income level associated with the person likely to buy my product?
- Is there an age pattern associated with the person likely to buy my product?
- Is there an ethnic or religious affiliation with the person likely to buy my product?

Using local demographic trends should help you identify information such as age, gender, race, marital status, education, household size, income. Based on this information, you can develop potential "customer profiles" of your target customer.

The next questions to then ask are:

- Is there a season when customers are more likely to buy my product/service?
- Why would a customer buy my product/service?

# **The Competition**

Successful direct marketers build their marketing action plan based on not only an in-depth knowledge of the wants and needs of their potential customers but also by studying the competition. Less successful direct marketers can regularly misjudged the true strength of the competition and over estimated the loyalty of their customers. Consider the following:

• Who is your competition?

- Why do people buy from your competitors?
- How does your competition appeal to customers (convenience, price, etc)?
- How does your competition advertise and promote?
- What has your competition done to stay in tune with market trends?
- What are the similarities and differences between your products and the competitor's products?

# **Market Research**

In reality, everything we've discussed to this point is all a part of doing market research. The research that has been discussed helps you determine who you want to sell your products/services to and who you might be competing against to capture the customers. However, armed with this information alone may not be enough for you to be successful.

Research about existing consumer trends related to your product/service would be a wise step. There is a wide variety of consumer information available through trade associations, University researchers and other institutions that should be easily found either through internet searches, calling trade associations or connecting with your local UW Extension office.

Additionally, it may be necessary to conduct your own market research studies. In some cases, the only way to truly understand the buying patterns, needs and wants of a local community/ethnic group/religious group is to ask them. This is especially true in the example of Jimmy and Jenny. There is significant information available relating to ethnic markets that will be extremely helpful to them. However, for Jimmy and Jenny to truly understand the existing situation and how their product/service will perhaps either

fill a gap or provide a better, higher quality product, their best solution is to connect with the community and start asking questions.

Conducting market research studies should not be complicated. You will find you have a wide variety of study participants just within your friends, family and co-workers, etc. The only caution is to choose people you know will provide you with true and constructive information.

You can conduct the research in a variety of ways. A simple way is to hand out samples of your products/service and ask for constructive feedback about what they liked and didn't like. Ask questions such as:

- What are current buying trends related to the product/service? Do they buy the product once a week, month, year, etc?
- How much of the product do they purchase when they purchase it?
- Where do they currently purchase the product/service?
- What comparable products/services are they currently using that your product/service could substitute for?
- Would they be willing to substitute your product/service for what they are currently buying? Why or why not?
- What would you need to do differently (price, packaging, quality, convenience, etc) for them to consider switching to your product/service if they aren't currently willing to switch?
- Are there other products/services that they would recommend you consider adding to your product/service line?

With all of the marketing research work behind you, it is now time to determine where you want to focus your marketing energy. Choose a niche where you can uniquely meet customer needs where there is currently little or no competition or where the existing competition can't meet the existing demand.

Now is also the time to determine if you will be introducing new products/services to your new target customers. Additionally, spend some quality time really evaluating what your pricing structure should be. Time after time, consumers have shown that they will pay the price for a high quality, local product/service that they have confidence in. There should be no shame in asking a fair price that will allow you to make some money and continue running a successful business.

While there will be time and energy involved in creating a marketing plan, your research will help you integrate new markets, find new customers and improve the bottom line of your business.

This article is an excerpt from the Publication:

<u>Developing Your Farm's Marketing Plan</u> by Rose

Skora, Community Agriculture Educator, Kenosha
and Racine Counties UWEX. A complete copy of this
publication can be viewed at
<a href="http://learningstore.uwex.edu/pdf/A3811-13.pdf">http://learningstore.uwex.edu/pdf/A3811-13.pdf</a>.

IF you would like to receive future copies of this e-newsletter through e-mail please send a request, titled Weekend Farmer Subscriber, to Adam Hady, Richland County Agriculture Agent at adam.hady@ces.uwex.edu.

This **free** newsletter will be only available in electronic format, so please subscribe.