Stocker Cattle – An Opportunity for the Grazing Entrepreneur

Calves purchased/raised for grazing, then sold to a finisher. The term “stocker” was coined by producers referring to animals purchased in the spring to “stock” mountain pastures. The goal is to add weight economically using relatively inexpensive, excess pasture.

How can you (seasoned, new-to-farming or thinking about becoming a farmer), get in on this phenomenal opportunity?

The Stocker Short Course (SSC) to begin June 24th – Sign up NOW!
The course will run on the last Saturday of every month from 10 am – 2 pm, June 2017 to May 2018. Most sessions will be held in the Hornell/Alfred region, other on-site locations to be determined by the topic.

Topics of study will include
• land acquisition
• cattle procurement
• grazing management
• nutrition and health
• economics and marketing

Internship participation available. Students completing the course will leave with a business plan, practical experience and knowledge to support their entry into the stocker business.

Cost for the course is $200/person, $100/second person from same farm and/or family. Space is limited to 30 persons, so contact us very soon.

Interested parties should contact Barb Jones, Cornell University Department of Animal Science, bjj6@cornell.edu, 607-255-7712. For additional information, contact Mike Baker, Cornell Beef Extension Specialist, mjb28@cornell.edu, 607-255-5923. The Stocker Short Course is funded by the NYS Department of Agriculture and Markets “Southern Tier Stocker Initiative.”
I was out in winter barley fields this week in Genesee, Orleans and Monroe Counties. SY Tepee that was planted earlier (September) is flowering). Those planted a little later were heading out but no flowers yet. Time for fungicide applications! A couple of fields have already been sprayed with Caramba or Prosaro earlier this week. Others will be ready this weekend.

Also, scout for insects prior to the fungicide applications. In one field I was able to find Cereal Leaf Beetle (CLB) eggs and larvae that had just hatched (black shiny and 1/8" long). All those that we found were down in the canopy. Eggs are very small, orange and usually on the top surface of the leaf right on the midrib. They are sometimes laid end to end in a row of 2 to 4. Best to spray for them now while you are going over the field with your fungicide.

Common armyworms (CAW) could also be a concern right now. We have been catching high numbers of moths in pheromone traps the past couple of weeks. Females like to lay their eggs in grassy fields and winter grains. We are getting reports of very small larvae (1/8” – 1/4”) being found in grass fields in Jefferson County by Mike Hunter yesterday. It is very hard to find them when they are this small. You will have to look at the bottom leaves of the plant for feeding injury. You will see small pieces of the leaves missing. They are nocturnal and will hide in the dead leaves at the base of the plant during the day. Watch for blackbirds diving into the field. This is a sure sign that CAW are present!

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NYS IPM Weekly Field Crops Pest Report, May 18, 2017
Kenneth Wise, NYS IPM

VIEW FROM THE FIELD

Alfalfa Weevil
Mike Stanyard (CCE Northwest NY Dairy and Field Crops Team) reports several fields over threshold for alfalfa weevil and are likely losing yields. This week at the Valatie Farm I found alfalfa weevil adults as well as 1st and 2nd instar larvae. There was less than 5% tip feeding on the alfalfa leaflets. The economic threshold is 40% tip feeding by alfalfa weevil larvae before the 1st cutting. The interesting thing is that I found many alfalfa weevil larvae that were infected with a disease (Zoophthora spp) that killed them. This is a form of natural control of this pest. Sometimes this pathogen can wipeout a population of alfalfa weevil in a field, but you never know when it will really happen.

Cereal Leaf Beetle
I started to see cereal leaf beetle adults on triticale at the Cornell Farm in Valatie. With the warmer weather we will start to see cereal leaf beetle eggs and larvae. (See article below on cereal leaf beetle)

Black Cutworm and True Armyworm
We are still capturing black cutworm and true armyworm moths. Black cutworm numbers are starting to increase. Western NY Crop Association have caught high numbers of black cutworm moths this week. Make sure you monitor for black cutworm as the corn starts to emerge. See trap counts below.

Weeds
There were a lot of weeds in the clover fields at the Cornell Farm in Valatie. Much of the clover died this year. This allows the weeds to fill the gaps. See article below
Lady Beetles
I am starting to see lady beetles in both small grains, alfalfa and clover. The two species observed this week were; Fourteen Spotted Lady Beetle (Propylea quatuordecimpunctata) and Seven-spotted Lady Beetle (Coccinella septempunctata). Lady beetles are very important predators of aphids in many different crops.

The Seven-spotted Lady Beetle (Coccinella septempunctata), introduced from Europe, is an effective predator of aphids. A single larva can consume 800 to 1,000 aphids and an adult will eat from 3,000 to 4,000 aphids during its lifetime. This is a large lady beetle and is 7-8 millimeters.

Cereal Leaf Beetle in Small Grains
Ken Wise, NYS IPM
Cereal Leaf Beetle is considered a minor pest of wheat and other small grains. BUT I have seen it increase of the last several years in the Hudson Valley on triticale and wheat. I saw many cereal leaf beetle adults in triticale at the Cornell Research Farm in Valatie this week. The adults are 3/16 inch long with metallic bluish-black head and wing covers.

Eggs are found on the upper surface of the leaves near the midrib. Eggs are elongate, yellow to brown about 1/16 inch long, and are laid in chains of two or three.

Small black slug-like larvae emerge from the egg and reach about a 1/4 inch long. Larvae feed on the leaf surface, leaving long narrow white strips between the veins.

Cereal Leaf Beetle is normally more of a problem in oats but can occasionally reach threshold levels in wheat. There is no threshold for cereal
leaf in small grains for forage. The threshold for small grains harvested for grain is before the boot stage there must be 3 or more larvae plus eggs per stem. But after the boot stage the threshold is one or more larvae per flag leaf.

Why Do Weeds Get Into the Alfalfa or Clover Fields?

Ken Wise, NYS IPM

When walking alfalfa/clover fields at the Cornell Research Farm in Valatie there were several species of weeds growing in openings that have occurred between the forage. In this case it seems that several of the clover plants had died this year or last year. Some of the clover plants had recently died.

After digging them I cut the tap root open to discover root rot. There are a wide range of pathogens that attack the roots of clover and alfalfa.

There are a few ways pathogens can get into the roots. One is drought stress and could have been the reason they died at Valatie with this issue last summer. Drought can cause the plants extreme stress due to the lack of moisture. When clover or alfalfa is weakened pathogens can take advantage of the plant and enter the root.
The second option is root feeding insects like the larvae of clover root curculio and alfalfa snout beetle. Larval stages of these insects feed on the roots opening them to diseases. Alfalfa snout beetle can also kill the plant from its feeding. OK... so what does this have to do with weeds? After the plant dies it leaves an open area in the field for weeds to grow. Normally with a good healthy crop the alfalfa and clover can compete with the weeds for space. But once there are openings weed seeds can germinate and fill in the open space as seen in the photo below:

![Weeds fill in between forage](image)

If you think about this, every place that a weed is growing is one less place for an alfalfa/clover plant. The obvious consequence is a loss of yield and hay quality potential.

**Fusarium Head Blight Assessment Tool**
This tool can help you determine if fields in your area might be at risk for fusarium head blight (AKA Scab) on winter and spring wheat. The map is starting to show some risks if your winter wheat is approaching flowering in some areas of the state. While it might be a little early for flowering it is good to stay on top of the potential risk. You have to select New York and the map will show you the risk in your area of the state.

http://www.wheatscab.psu.edu/

One way to describe the 2017 planting season? Soggy. If you have standing water in your planted fields, you may be considering replant. “Survival of young corn plants under these conditions depends on several factors,” says Roger Elmore, Extension cropping systems agronomist at University of Nebraska–Lincoln.

“Smaller seedlings are more susceptible than larger seedlings,” says Elmore in a University of Nebraska *Crop Watch* article. But the effect of standing water on germinating seeds is not well known. Hybrids will respond differently to standing water.

**48 HOURS**
Timing is everything. If there’s standing water in your field, you have 48 hours before the oxygen supply will become depleted, says Elmore.

“Cool air temperatures help to increase the possibility of survival,” he says. “Yet, we would
not expect survival of germinating seeds to be greater than that of young plants; they should not be expected to survive more than four days.”

Here are the odds for survival of young corn plants in varying conditions, according to the CropWatch article.

- **Before emergence:** Seeds can survive up to four days.

- **Prior to the sixth leaf and underwater (6 inches of water on surface) with a temperature less than 77°F.** Will survive for four days. Longer flooding results in lower yields especially at lower nitrogen levels. Some plants will be buried by sediment and residue and may not survive.

- **Prior to the sixth leaf and underwater (6 inches of water on surface) with a temperature greater than 77°F.** May not survive 24 hours.

- **Corn prior to sixth-leaf stage in saturated, cold soil with flooding:** Seed rots, seedling blights, various other pathogens, crazy top.

If it becomes necessary to replant, consider which herbicides have been sprayed, says Randy Hagen, knowledge transfer manager at Monsanto. “Some crops can't be planted back to a field that had a certain herbicide.”

Don’t make a drive-by assessment either, advised Hagen. “Investigate the stands by going out and doing population stands in several spots of the field.”

Also, as we get closer to June, it's time to start considering switching maturities. “If you have an option to do silage, you may want to go in and replant with the same maturity,” says Hagen. However, for grain, there may be a consideration to move to an earlier product. Hagen recommends looking at soil type, early frost dates, and yield potential of the of the original product before moving to an earlier maturity. If replanting goes into June, consider a hybrid five days earlier or so, he says.

Below are seven factors Elmore recommends considering when dealing with flooded fields.

1. The longer an area remains ponded, the higher the risk of plant death.

2. Completely submerged corn is at higher risk than corn that is partially submerged. Plants that are only partially submerged may continue to photosynthesize, albeit at limited rates.

3. Corn will survive longer when temperatures are relatively cool — mid-60s or cooler — than when it's warm — mid-70s or warmer.

4. Even if surface water subsides quickly, the likelihood of dense surface crusts forming as the soil dries increases the risk of emergence failure for recently planted crops.

5. Extended periods of saturated soils after the surface water subsides will take their toll on the overall vigor of the crop.

6. Associated with the direct stress of saturated soils on a corn crop, flooding and ponding can cause significant losses of soil nitrogen due to denitrification and leaching of nitrate N.

7. In addition, diseases and other problems can develop due to silt in the whorls.

**Heifer Economics**

**Peter Tozer, Matthew Gabler, Trent Schriefer, Jud Heinrichs**

The Pennsylvania State University Department of Dairy and Animal Science

**Introduction**

Today’s successful dairy operation recognizes that heifers are an important investment in the future. They place high value on the heifer and regard it as a managed resource, whether raised on the farm or contract grown. Unfortunately, on many farms, the dairy heifer is the most overlooked and under managed asset on the farm.
The main goal for managing replacement heifers is to freshen them between 22 and 24 months of age to reduce expenditures and to increase total milk production. This can be accomplished through good nutrition and sound animal management practices.

Other areas of focus include genetic improvements. This can be made through a well planned and thought out breeding program. Maintaining a good health program during the heifer-raising period is important. This includes vaccinations, deworming, and any necessary treatments.

The success of a heifer-raising program is directly related to its overall economic management. The purpose of this paper will focus on the economic awareness needed for developing a long-term heifer raising enterprise.

Economic Awareness
The costs involved in raising heifers should be an important issue for dairy farmers. Replacement animals typically account for 15 to 20 percent of milk production costs. Replacement heifers rank as the second or third largest component of production costs after feed and possibly labor on most dairy farms. These costs can vary from farm to farm depending on individual management strategies.

The cost of raising heifers is influenced by two main concerns, management and economic. The management concerns are:
1. Herd morbidity and mortality rates.
2. Age at first calving and herd replacement rates.

The economic concerns are:
1. Ownership costs
2. Operating cost

Management Concerns
Herd morbidity and mortality rates
Minimizing calf morbidity and mortality rates involves a combination of management components from a good dry cow vaccination program, colostrum management, sanitation, and proper nutrition and care of the newborn. In addition, it includes a variety of preventative measures as well as maintaining good health practices. Ultimately, controlling calf health problems will save many times the cost of these practices with reduced heifer raising costs.

Age at first calving
Age at calving and herd replacement rates are the largest factors influencing heifer costs. This affects the numbers of heifers that must be raised to maintain a profitable milking herd size. Table 1 summarizes the numbers of heifers that must be maintained at various levels of herd replacement rates and ages at first calving. These two factors alone have a major impact on the overall costs.
Table 1. Heifer herd size for a 100-cow herd and a 10% heifer cull rate.

<table>
<thead>
<tr>
<th>Cull Rate (%)</th>
<th>Age at First Calving (months)</th>
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<tbody>
<tr>
<td></td>
<td>22</td>
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<td>26</td>
<td>53</td>
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<td>61</td>
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<td>38</td>
<td>77</td>
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<tr>
<td>42</td>
<td>86</td>
</tr>
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When age at calving increases, so does the need for heifer housing, feed, labor, and management. This increase in input variables can be as much as 50% or more in extreme situations. An example of this magnitude of increase would be comparing a farm with a 26% herd turnover rate and 22 month calving age with another having a 38% herd turnover rate and a 30 month calving age. The first farm would need 53 heifers in the replacement herd, while the second would require 106, or twice as many heifers just to maintain a constant 100 cow herd size. The costs to raise these extra heifers can be tremendous and make a major difference in the profit potential of each farm.

Economic Concerns
It is important for farmers to understand the total costs involved in raising dairy heifers. In order to operate a successful enterprise it is necessary to know the current costs in order to predict future costs.

Ownership costs
Ownership costs include buildings, equipment, property, machinery, depreciation, interest on investment, repairs, taxes, and insurance. Many of these things that may seem obvious to the owner may get overlooked. Care should be given to include all ownership costs when evaluating a heifer-raising program. Each ownership cost adds significantly to the overall cost of raising a heifer.

Operating costs
Operating costs include feed, labor, bedding, utilities, veterinary care, breeding costs, and supplies. These vary nearly proportional to the number of heifers raised at one time. With good record keeping most variable costs are easily understood and calculated.

Table 2 gives a typical breakdown of heifer expenses, both ownership and operating, from birth to prefreshening. The table shows the results from a spreadsheet that calculates the costs to raise a replacement heifer. Aspects that need to be included when calculating the cost to raise a heifer are feed, labor, breeding, bedding, health, buildings, equipment, mortality, and interest.

In Table 2, costs are separated by the following age periods:
- birth to weaning
- weaning to 6 months
- 6 months to first bred
- bred to prefreshening

Calculating costs in this manner provides managers the ability to evaluate areas of strength and weakness within their heifer-raising program.

Feed costs usually constitute 60% of the total overall expense to raise heifers. The most expensive age period in feed cost per heifer is birth to weaning. This is due to the large labor and feed costs per animal.

Labor costs calculate the time required raising a heifer. Every aspect has some cost associated with it, in this instance, the cost of time. Labor costs are the second highest expense in raising a heifer, around 13% of the total cost.

Breeding costs includes both artificial insemination and the use of a service bull. The use of a service bull is not a cheap breeding source. Maintaining a service bull on a heifer operation incurs cost such as the interest on the purchase of the bull, feed, and labor to manage the service bull. These costs are often quite large on a per heifer basis.
Bedding, health costs, buildings, and equipment costs are all necessary to calculate the costs to raise heifers. Even though buildings and equipment may have depreciated their value to $0, these items still require maintenance that must be calculated as real costs.

Mortality and interest costs calculate the opportunity cost of raising a heifer. Mortality cost is associated with the loss of the investment, while interest cost is the opportunity cost of having capital invested in a heifer versus the bank. These two cost estimates are the most overlooked items when calculating heifer-raising costs. This is because opportunity is a non-tangible product that cannot be seen or touched. However, it is a cost that must be calculated. Mortality and interest costs constitute the third largest expense.

It is impossible to estimate every cost that contributes to the total cost to raise a heifer. Expenses that are difficult to estimate include water, power, fuel for equipment, and time to transport or move heifers. Thus, when calculating the cost to raise a heifer it is advisable to incorporate a miscellaneous cost figure that can cover these costs (Table 2).

| Table 2: Costs of raising replacement dairy heifers. |
|----------------|----------------|----------------|----------------|----------------|
|                | Birth until Weaning | Weaning until 6 mo | 6 mo until 1st Bred | Bred until Prefresh |
| Operating Cost |                 |                      |                       |                  |
| Feed          | $50.82          | $112.46              | $228.02               | $309.83          |
| $701.18       |
| Labor         | $20.87          | $60.00               | $30.24                | $71.27           |
| $182.37       |
| Breeding      |                |                      | $21.60                |                  |
| $21.60       |
| Bedding       | $2.56           | $6.42                | $1.35                 | $11.02           |
| $21.35       |
| Health        | $7.90           | $1.62                |                       | $2.81            |
| $12.33       |
| Capital Ownership Cost |       |                      |                       |                  |
| Buildings     | $0.91           | $3.64                | $20.86                | $34.61           |
| $60.02       |
| Equipment     | $0.90           | $3.54                | $6.93                 | $6.18            |
| $17.55       |
| Animal Ownership Cost |       |                      |                       |                  |
| Mortality     | $0.60           |                      |                       | $0.60            |
| Interest      | $1.05           | $6.80                | $15.36                | $48.33           |
| $71.54       |
| Miscellaneous | $10.00          | $10.00               | $10.00                | $10.00           |
| $40.00       |
| Totals        | $87.71          | $210.75              | $314.43               | $515.65          |
| $1,128.54   |
| Age at Weaning/d | 42             | Age at 1st Bred/mo. | 15        | Age at Prefresh/mo. | 23.5   |
| Per Day       | $2.25           | $1.53                | $1.17                 | $2.02            |
| $1.60       |
| ADG/lbs       | 1.5             | 1.8                  | 1.8                   | 2.0              |
| 1.87       |
| Per lb/gain   | $1.50           | $0.85                | $0.65                 | $1.01            |
| $0.86       |

Ownership costs for the heifer operation are often hard to calculate and easy to overlook. It is important for farmers and heifer growers to know what the actual cost of their heifer-raising program is before changes can be made. Economic awareness will be the most valuable tool the farmer has for making sound operating decisions. In addition, by knowing their actual heifer-raising costs, some farmers find that the
alternative of having someone else raise their heifers (contract grower) is a cheaper alternative.

Specialization in the dairy industry and pressure to make sound economic and environmental decisions has created a need to evaluate each dairy management decision. Research has shown that the two most expensive age periods based on total cost per day to raise a heifer, are birth to weaning and bred to prefresh. Selecting management methods that can decrease the length or expense of these periods can have a significant impact on the total cost to raise a heifer.

Other Areas of Improvement
There are some aspects of calf and heifer raising that can be more efficient than others. Many farms can benefit by reducing some cost components in their replacement program without reduction in heifer quality. The following is a listing of some areas that should be considered as potential cost saving areas for heifer raising on most farms.

1. Feed a lower cost source of liquid feed to young calves.
2. Feed high quality and palatable concentrates to younger animals.
3. Analyze forages and run ration formulations for all major groups.
4. Monitor group size and age/weight variation within groups.
5. Use proven feed additives to improve growth and feed efficiency.
6. Keep weight gains steady at 1.8 pounds per day before nine months of age and 2.0+ pounds per day after nine months of age.

Feed a lower cost source of liquid feed to young calves.
Depending on a variety of aspects available to the farmer, changing from whole milk to other liquid feeds can be cost effective. Milk replacers are often about 50-60 percent of the cost of feeding whole milk, if salable milk is fed. Where farms are set up for feeding waste milk and colostrum in a safe and easy manner, this can be even more cost effective. Waste milk systems are not without problems or increases in management, however many farms can handle the additional problems that arise. Waste milk and colostrum must be fed in a consistent manner to avoid health problems, and if possible, pasteurized to minimize any health problems and disease transfer.

Feed high quality and palatable concentrates to younger animals.
This means feeding the best quality calf starters and calf growers to the young calves. A high quality starter, one with no mold, no dust, with a good texture, high levels of nutrients, and plenty of molasses and or flavoring agents, will make a dramatic impact on early starter and dry matter intake. Optimizing starter intake will allow calves to grow at higher rates of gain and will allow for earlier weaning ages. Typically, calves need 1.5 to 2 pounds of grain per day for at least three days prior to weaning. Once weaned, calves require significantly less labor and if they continue to grow at rapid rates, will be much more economical per pound of gain then when fed liquid diets.

Analyze forages and run ration formulations for all groups.
Since forages make up a large part of heifer diets, they must be sampled and analyzed for nutrient content in order to achieve balanced diets for these animals. Slightly or severely misbalance diets will not be utilized nearly as well as those that are balanced. When forages make up a large part of the diet, even a small difference between estimated and actual analysis will be costly. In addition, allocating forages to the various age groups that will best utilize them is an aspect of forage feeding that can be cost effective.

For example, high protein forages should be fed to younger aged heifers that have a high protein requirement. Lower protein forages should be fed to older aged heifers with lower protein requirements and increased gut
capacity for less nutrient dense forages

**Monitor group size and age/weight spreads within groups.**
This aspect of heifer feeding management means monitoring the different ages and sizes of heifers within a group, and how well their nutrient needs are being met by the diet for that group. Smaller heifers will tend to under-consume and larger heifers will over-consume rations if grouped together and fed a restricted diet.

**Use proven feed additives to improve growth and feed efficiency.**
The use of ionophores has proven effective in improving feed efficiency and/or growth rates of heifers. This improvement is in the range of 5 to 7 percent or more, and is well documented in the scientific literature. These compounds also have other benefits for the dairy heifer including control of coccidiosis. The cost/benefit ratio is extremely favorable in using these compounds.

**Keep weight gains steady.**
Often farmers get heifers too fat or too large early in life and cause these animals to require more nutrients to be needed for maintenance later in life when their growth rates are less. Unless rapid early growth is used with earlier calving, this practice is not as efficient as raising heifers at a steady rate of gain as needed for the desired age and weight at calving. Growing heifers too slowly in early life is also expensive as it requires more nutrients in later stages of heifer development, increases age at calving, or reduces body weight at calving. All of these are detrimental to overall heifer economics.

Research has consistently demonstrated that rate of gain greater than 1.8 pounds per day before nine months of age will cause a decrease in first lactation milk production. After nine months of age, increasing growth rate to 2 pounds per day or more will achieve larger size heifers at calving.

Heifer raising costs can be great if they are not controlled and evaluated given the farm and the required end product. Periodic monitoring of heifer economics will pay great returns for dairy farmers.

This publication is available in alternative media on request.

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Help Your Lambs Beat the Heat
Four simple steps can help your lambs beat the heat this summer

Julian (Skip) Olson, DVM, Technical Services Manager for Milk Products

PUBLISHED ON MAY 23RD, 2017

“Heat stressed lambs could experience a decrease in growth rate due to a loss of appetite and suppressed immunity, which can lead to other health challenges,” says Julian (Skip) Olson, DVM, technical services manager for Milk Products. (Delaina Haslam, Flickr/Creative Commons)

CHILTON, Wis. — For many people, summer is the time for family vacations, days at the pool and watching fireworks. But for growing spring-born lambs, hot summer weather can bring on health and performance challenges. These challenges can affect lambs for their entire life.

“Heat stressed lambs could experience a decrease in growth rate due to a loss of appetite and suppressed immunity, which can lead to other health challenges,” says Julian (Skip) Olson, DVM, technical services manager for Milk Products. “Sheep are most comfortable at 45-70 degrees F. When humidity sets in or temps go above 75 degrees F, sheep begin to feel the negative effects of the heat.”

These four tips can help your flock stay comfortable and healthy all summer long.

1. Hydration is key

“Growing lambs need to drink water more often than adults due to a higher metabolism rate,” says Olson, adding, “And, with a greater percentage of their body weight being comprised of water in comparison to adults, providing access to fresh water at all times is a must.”

On average, growing lambs will drink 1 to 2 gallons of water per day. During times of heat stress, sheep water consumption typically increases by 50 percent once temperatures reach 70 degrees F and by nearly 100 percent at 80 degrees F.[1]

During periods of heat stress offer your sheep free-choice electrolytes with their water 2-3 times per day. Electrolyte supplements containing electrolytes, energy and amino acids are designed to help replenish fluids and lost nutrients.

2. Shade and ventilation are essential

Just like people seek air conditioning during the hot days of summer, shade gives your flock a break from the sun’s heat.

A range of shade options are available and can fit many budgets. Natural shade may
include large trees, bushes and even stacks of hay. If natural shade is not available, shade cloth, mesh fabric or even a tarp can work, amongst many other options.

“Regardless of the shade option you choose, it is important to provide enough shade for the entire flock to lie down at the same time,” says Olson.

If housing your sheep in a permanent structure such as a shed or barn, it is important to provide ample ventilation. An effective ventilation system during warm weather cools the building by replacing the warm air inside with fresh air and removes excess moisture. Proper ventilation can be achieved either naturally (without fans) or mechanically (with fans).

3. Provide adequate nutrition

Having quality forage on hand is essential, as pasture quality is typically lower during hot weather. A high-quality grain mix is also recommended to help offset reduced growth rates during warm weather.

Hot weather can also reduce ewe milk production. If your lambs have not been weaned, ensure they are receiving enough energy to grow and thrive.

“If milk production drops in heat-stressed ewes, supplemental liquid nutrition is needed. Look to a lamb milk replacer containing at least 23 percent protein and 30 percent fat,” says Olson. “Milk replacer needs will vary depending on your lamb’s weight and appetite, so be sure to read the bag instructions to ensure you’re providing adequate nutrition.”

4. Know how to identify heat stress and act immediately

Despite your best efforts, heat stress may be inevitable in some cases. Watch for these clinical signs of heat stress and work with your local veterinarian to assess each lamb or ewe:

- Continuous panting
- Rapid breathing
- Weakness
- Inability to stand
- Elevated rectal temperature (over 105 degrees F – rectal temperature exceeding 107 degrees F can be fatal)

“Avoid rinsing lambs with water to cool them off,” says Olson. “While evaporative cooling works well with many other animals, this is not the case with sheep. Air flows through the wool, which helps regulate body temperature and when wool is wet, air is not able to flow through.”

For more information about raising lambs, visit savalam.com or like My Farm Journey on Facebook.

Milk Products, based in Chilton, Wis., manufacturers high-quality animal milk replacers and young animal health products. Using its innovative manufacturing technology, Milk Products produces over 700 unique animal nutrition products for numerous independent feed manufacturers, wholesale distributors, and large retail chains. Our customers choose whether these products are sold under their private label brand, or under the Sav-A-Caf® brand which is manufactured and marketed by Milk Products.


—Milk Products

See more at: https://www.morningagclips.com/help-your-lambs-beat-the-heat/#sthash.BLNg66pE.dpuf
**Dairy Market Watch**

<table>
<thead>
<tr>
<th>Milk Component Prices</th>
<th>Milk Class Prices</th>
<th>Statistical Uniform Price &amp; PPD</th>
<th>MPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Butterfat</td>
<td>Protein</td>
<td>I (Boston)</td>
</tr>
<tr>
<td>Apr 16</td>
<td>$2.23</td>
<td>$1.84</td>
<td>$16.99</td>
</tr>
<tr>
<td>May 16</td>
<td>$2.28</td>
<td>$1.49</td>
<td>$16.95</td>
</tr>
<tr>
<td>June 16</td>
<td>$2.41</td>
<td>$1.48</td>
<td>$16.39</td>
</tr>
<tr>
<td>July 16</td>
<td>$2.59</td>
<td>$1.91</td>
<td>$16.95</td>
</tr>
<tr>
<td>Aug 16</td>
<td>$2.48</td>
<td>$2.57</td>
<td>$18.32</td>
</tr>
<tr>
<td>Sep 16</td>
<td>$2.31</td>
<td>$2.56</td>
<td>$19.81</td>
</tr>
<tr>
<td>Oct 16</td>
<td>$2.04</td>
<td>$2.29</td>
<td>$19.85</td>
</tr>
<tr>
<td>Nov 16</td>
<td>$2.10</td>
<td>$2.80</td>
<td>$18.03</td>
</tr>
<tr>
<td>Dec 16</td>
<td>$2.34</td>
<td>$2.69</td>
<td>$20.13</td>
</tr>
<tr>
<td>Jan 17</td>
<td>$2.53</td>
<td>$2.18</td>
<td>$20.70</td>
</tr>
<tr>
<td>Feb 17</td>
<td>$2.42</td>
<td>$2.23</td>
<td>$19.98</td>
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<tr>
<td>Mar 17</td>
<td>$2.42</td>
<td>$1.82</td>
<td>$20.15</td>
</tr>
<tr>
<td>Apr 17</td>
<td>$2.35</td>
<td>$1.69</td>
<td>$19.30</td>
</tr>
</tbody>
</table>

**April Utilization (Northeast):** Class I = 30%; Class II = 23%; Class III = 25%; Class IV = 22%.

Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.

*At a milk margin minus feed costs of $8 or less, payments are possible depending on the level of coverage chosen by the dairy producer.

**Cheese:** Milk supplies are abundant for cheese production in the United States. Milk management is becoming a concern for cheese manufacturers across the country. Northeastern and Midwestern cheesemakers continue to try to match milk supplies with active production. Generally, cheese barrels are long. In the Northeast, retail orders have increased. CME market prices have given contacts mixed feelings. Bullish contacts are taking the increasing prices as a sign of market improvement. Other contacts suggest increased CME prices could ward off potential global interests.

**Butter:** United States butter prices are fluctuating. In the Northeast, prices are steady to higher. Recent news of export opportunities has many individuals wondering what will happen to the butter price. The recent price increases prompted a rush of domestic buying activity. Butter production is generally steady. Throughout the U.S., cream is available for churning. Ice cream manufacturers are pulling larger amounts of cream, allowing some butter makers to ease back a little on production. Butter inventories are controllable to long, as some plants are planning to build late summer/fall inventories. Interest is mixed.

**Friday CME Cash Prices**

<table>
<thead>
<tr>
<th>Dates</th>
<th>4/21</th>
<th>4/28</th>
<th>5/5</th>
<th>5/12</th>
<th>5/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter</td>
<td>$2.09</td>
<td>$2.10</td>
<td>$2.10</td>
<td>$2.26</td>
<td>$2.37</td>
</tr>
<tr>
<td>Cheese (40# Blocks)</td>
<td>$1.54</td>
<td>$1.52</td>
<td>$1.60</td>
<td>$1.63</td>
<td>$1.67</td>
</tr>
</tbody>
</table>

**Fluid Milk:** In most regions of the U.S., farm milk output is steady to higher. Bottling demand is steady to slower across the country. Bottling demand in the Northeast, Florida, and much of the Western/Mountain states is declining.

**Dry Products:** Low/medium heat nonfat dry milk (NDM) prices shifted up in all aspects across the country. Low/medium heat NDM demand is fair, and contacts suggest current demand has helped prices. However, other contacts question the price increases with ample NDM production and supplies. High heat NDM prices held steady in the Central and East as spot trading was light, but the bottom of the range slightly dipped in the West. Dry buttermilk spot activity was generally light across the country, and inventories are mixed in the Central/East regions, while Western supplies are decreasing. Dry whole milk prices are steady. Trading of dry whole milk was moderate. Dry whole milk market undertones are uncertain, but showing signs of firmness.

**Organic Dairy Market News:** AMS reports total organic milk products sales for March 2017, 231 million pounds, is up 8.0 percent from the previous March and up 2.7 percent, January-March compared with the same period of 2016. Total organic whole milk products sales for March 2017, 89 million pounds, is up 17.4 percent compared with March last year and up 10.6 percent, January-March compared
April may have been the bottom for milk prices. The Class III price fell from $16.77 in January to $15.22 in April and May should be near $15.60. Cheese and butter prices have responded to a slower growth in milk production and improved dairy exports. January milk production was 2.6% higher than the previous year, but March production was up just 1.7%. First quarter dairy exports were up 14% by volume compared to a year ago, the best first quarter since 2014. While butterfat exports were 49% lower cheese exports were 12% higher. With nonfat dry milk/skim milk powder exports 19% higher and total whey exports 27% higher first quarter exports on a total solids basis were equivalent to 14% of total milk production compared to 12.6% a year ago.

Dairy product prices strengthened despite higher production and increased stock levels. While March butter production was just 0.3% higher than a year ago, cheddar cheese production was 8.0% higher and dry whey production 6.4% higher. Compared to a year ago, March 31st stocks of butter were 12.1% higher, total cheese stocks 8.5% higher and dry whey 3.6% higher. The wider than usual price spread between cheddar blocks and barrels is explained by stocks of barrels being more plentiful than blocks. The spread will likely return to more normal as the demand for processed cheese increases with the grilling out season soon starting.

Milk prices should continue to improve from here out. Domestic sales appear to be favorable for butter and cheese. Dairy exports are expected to continue above year ago levels. As world supply and demand tightens world dairy product prices will increase making U.S. dairy product prices more competitive. Milk production among major dairy exporters has been below year ago levels for the EU-28, New Zealand, Australia and Argentina. U.S. has been the exception with higher milk production. However, milk production by the other four exporters, particularly the EU-28 and New Zealand is expected to start running above year ago levels during the second half of the year. But, stronger buying by China and others will help to keep a tighter world supply-demand situation.

The level of U.S. milk production will determine how much milk prices strengthen. With expected favorable domestic sales and higher dairy exports we can expect improvement in milk prices if the increase in milk production stays close to 2%. USDA is forecasting 2017 milk 2.1% higher than 2016.

Class III futures have turned more optimistic about milk prices than at the beginning of May. Class III futures reach the low $16’s by June and the low $17’s August through November. With continued good domestic sales and improved dairy exports a Class III price in the higher $17’s by October is very possible. Some price forecasters even see $18 as a possibility. Weather will also be a factor as to where milk prices end up. Hot and humid summer weather can reduce the increase in milk production and depress milk components lowering the yield of dairy products per 100 pounds of milk. Milk prices will respond to relatively small changes in milk production, domestic sales and dairy exports. But, milk prices could average for the year $1.30 to more than $2 higher than last year.
COMING EVENTS:

June 12 - 6-8pm - Aquaponics Workshop - Save the Date - with Main Street Farms. 323 Owego Street, Montour Falls NY 14860. Please call Roger Ort 607-535-7161 for details.

June 14 – 6pm-8pm – Learn How To Grow Your Own Mushrooms, Chemung County Fairgrounds, 4-H Building, In this hands-on class Ken Mudge, Agroforestry Expert from Cornell University, will be walking us through the basics of growing shitake mushrooms on logs. Each participant will take home their own mushroom spawn inoculated log. Cost to attend is $15/person, class size is limited. Pre-registration with payment is required by 6/9/17! For more information please contact Shona Ort of CCE Chemung at 607-734-4453, ext. 227 or sbo6@cornell.edu. To register visit https://reg.cce.cornell.edu/GrowYourOwnMushrooms_207

June 22 - 6:30 to 8:30 pm – Good Goat Grazing! - Hawk Hall Meat Goats, 5765 Searsburg Road, Trumansburg, NY 14886. The Tri-County Graziers invite you to join them for the first twilight pasture walk of the season at one of the region’s oldest meat goat farms. No rsvp is required, but questions can be referred to Brett Chedzoy of Cornell Cooperative Extension in Schuyler County – phone: 607-535-7161, or email: bjc226@cornell.edu

June 23 – 25 - Farming the Forest - Mecklenburg, NY with Sean Dembrosky and Steve Gabriel. This course is designed for woodland owners, farmers, extension professionals, permaculturists, and homesteaders who want to gain a better understanding of the intricacies of forest management and build their skills in the management of productive woodlands. For more information or to register go to: http://wellspringforestfarm.com/

June 24-25th - 9:00 AM-5:00 PM – Hoof Trimming Certification Program - Held at Eagle’s Rest Farm 5225 Knapp Road, Middlesex, NY. Lunch is provided. $60.00 per day. Deposit: $30.00 for each day. You can participate in either one of the days, or both! For more information or to register go to: http://barefootisbest.weebly.com/

July 8 – 9am-3pm - Growing Organic Garlic for Profit, 6321 Newport Road, Camillus, NY and GillieBrook Farm. Cost is $25/person which includes lunch and all materials. Priority for spots will be given to veterans in the Southern Tier, but others are welcome to attend as space permits. For further information and to register: https://reg.cce.cornell.edu/vetsgrowinggarlic_203