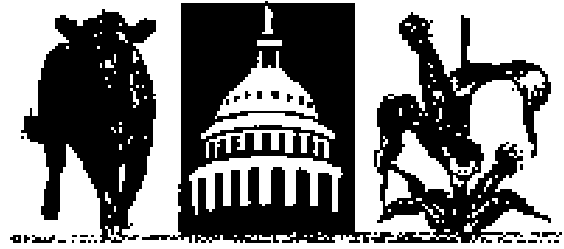


ECONOMIC AND POLICY UPDATE

Vol. 11 No. 7

July 27, 2011



<http://www.ca.uky.edu/agecon/index.php?p=209>

Kenny Burdine, Alison Davis, and Greg Halich Editors

In this issue:

- **Late Summer Nitrogen Applications to Pastures, Will they Pay this Year? – Greg Halich**
- **Mid-Year Cattle Inventory Report Shows Continued Herd Reductions – Kenny Burdine**
- **Farmers Growing Increasingly Dependent on Off-farm Income – Alison Davis**
- **H2A Record Keeping Requirements – Evan Conrad**

Late Summer Nitrogen Applications to Pastures, Will they Pay this Year?

We are close to the point where some livestock producers would normally start to apply nitrogen to tall fescue pastures to boost production levels and stockpile for fall and winter grazing. Since there are many factors that will impact the profitability of this practice, the question at hand is: Under what set of conditions will applying nitrogen to pastures pay this year?

To help answer this question, the cost of stockpiling was compared to the cost of feeding hay on a per day basis. Each additional grazing day resulting from nitrogen applications will save the farmer from feeding hay. However, this needs to be compared against the cost of the nitrogen applications. The trick is to figure out at what point adding additional grazing days become more expensive than feeding hay.

The price of nitrogen was evaluated on an elemental basis between \$.65-.85 per unit (\$435-570 per ton ammonium nitrate), with application

rates of 40 and 80 units/acre. Three response rates (low, medium, and high) were evaluated, corresponding to various soil moisture conditions. The application cost for spreading the nitrogen was set at \$5/acre.

Farm size and management practices were set at typical Kentucky conditions: 30 cow herd with late winter/early spring calving. Waste rates were estimated at 35% for hay feeding and grazing. Machinery and labor costs were estimated at \$.06 and \$.25 per cow-day for grazing and hay feeding respectively. P and K from the hay were assumed to be recycled back into pastures at a 50% rate at \$.57/lb for P₂O₅ and \$.52/lb for K₂O.

A range of hay prices were evaluated to determine which prices, if any, would result in profitable nitrogen applications. In general, there appear to be relatively few opportunities for profitable nitrogen applications this year. Using ammonium nitrate at \$.75/unit (\$500/ton), hay prices needed to be at or above \$50/ton and soil moisture conditions good to excellent (high response rate) to offer moderate savings. Hay prices need to be at or above \$70/ton with fair to good soil moisture conditions (medium response rate) to offer moderate savings.

Cost savings did not occur in the mixed fescue-clover stands even with the best soil moisture conditions when evaluated at the most likely hay and nitrogen prices (\$50/ton and \$.75/unit respectively). Hay prices need to be around \$70/ton before savings occur with the high response rate, combined with an effective nitrogen price of \$.65/unit. Additionally, any potential savings in the fescue-clover stands need to be balanced against the potential loss of clover due to N applications. As a

consequence, it does not appear that mixed fescue-clover stands would be good candidates for N applications this year.

For more detailed results, consult the publication “Profitability of Nitrogen Applications for Stockpiling Tall Fescue Pastures – 2011 Guide” that can be found at:

<http://www.ca.uky.edu/agecon/index.php?p=169>.

(Greg Halich)

Mid-Year Cattle Inventory Report Shows Continued Beef Herd Reductions

Last week, USDA released their mid-year cattle inventory estimates. There were no major surprises as the report showed continued liquidation of the US beef herd. With the exception of cattle-on-feed numbers, the only year-over-year increases in the report were on the dairy side, where expansion does appear to be underway.

Total cattle and calves and beef cow numbers were both down 1.1% from July 2010, with the beef cow herd estimated at 31.4 million. Also very telling was a 4.5% decrease in heifers held for beef cow replacements, confirming that expansion is not on the horizon. While state-by-state numbers are not available in the mid-year report, massive drought in the southern US, including Texas and Oklahoma, is no doubt a major factor. Of course other factors are also affecting beef cow numbers such as rising production costs and competition for ground for row crop production.

Cattle-on-feed numbers remain above 2010 levels, but this is most likely due to early placement of cattle in feedlots in drought stricken areas. It’s always interesting to compare the cattle-on-feed estimates from the mid-year inventory report to those from the July cattle-on-feed report, which only surveys those feedlots with a capacity of over 1,000 head. While both estimates showed increased numbers, the increase was greater in the larger feedlots. Also, a comparison of the two estimates suggests that more than 82% of cattle are being fed in feedlots with capacity of more than 1,000 head.

Dairy cow numbers increased slightly from last year and appear to be increasing this year as well. Dairy cow inventory was estimated at 9.2 million,

which was an increase of about 0.5% from last year. Heifers held for dairy replacements increased by a little less than 4% from 2010, which suggests that expansion continues. All information from the mid-year report can be found in the table below. (Kenny Burdine)

USDA July 1, 2011 Cattle Inventory

	2010 (1,000 hd)	2011 (1,000 hd)	2011 as % of 2010
Total Cattle and Calves	100,100	100,000	99
Cows / Heifers That Have Calved	40,900	40,600	99
Beef Cows	31,750	31,400	98
Milk Cows	9,150	9,200	101
Heifers 500 Pounds and Over	16,200	16,000	99
For Beef Cow Replacement	4,400	4,200	95
For Milk Cow Replacement	4,050	4,200	104
Other Heifers	7,750	7,600	98
Steers 500 Pounds and Over	14,400	14,200	99
Bulls 500 Pounds and Over	2,100	2,000	95
Calves Under 500 Pounds	27,500	27,200	99
Cattle on Feed	11,900	12,200	103

Farmers Growing Increasingly Dependent on Off-farm Income

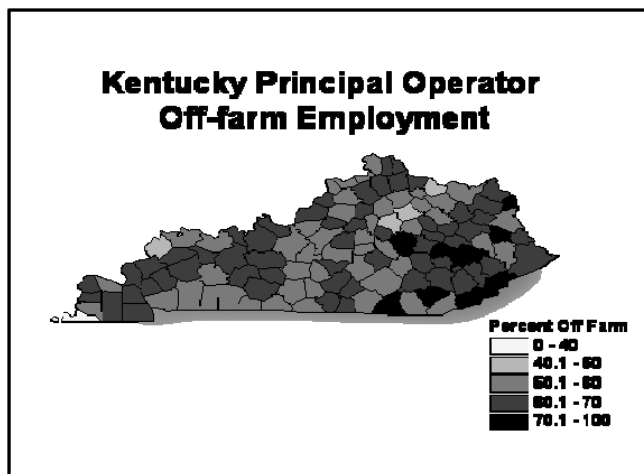
The present trend suggests that there is a growing percentage of farmers who earn their primary income from off-farm sources. The reasons for this might include declining product prices, technological changes in production, or simply a changing preference away from full-time farming. The fact is that there are only a handful of counties in Kentucky where more than 50% of principal operators are full-time farmers (see figure on the following page).

However, this trend does not suggest that farming has a diminishing role in the economic and social life of our rural communities. It seems that to retain producers in rural areas, it is important to provide them and their families with the maximum number of employment opportunities and a strong sense of community and quality of life. Instead, this trend beckons the question, “What opportunities are available for producers if they choose to earn income away from their farm?” Are our rural communities succeeding in providing alternatives to full-time farming that will succeed in retaining and attracting new farming opportunities to our state? And if we aren’t, what as a community can we do to reach those goals?

In general, we expect farmers to work in primary agriculture, building and construction, and professional services occupations. Without knowing exactly what these occupations are, it is a bit more difficult to determine how successful we are at meeting their needs. However, overall, we can look at several factors:

- 1) Unemployment rates. High unemployment rates suggest that individuals cannot find work and there are not enough opportunities for those that are seeking gainful employment.
- 2) Commuting trends. Are the majority of your income-earning residents traveling outside the county for employment? If so, this suggests that there may not be attractive employment opportunities at home.
- 3) Entrepreneurship. Are there a significant number of self-employed, innovative individuals in your county? If not, perhaps the community does not have an entrepreneurial friendly climate.

There are certainly other ways to gauge your community's success at providing job opportunities. If you find that your community is deficient in any of the three options listed above, this should be a signal that the community may not be meeting the needs of its farm and non-farm residents. There isn't a clear-cut, easy answer to resolve these deficiencies but there are opportunities to simultaneously address community and economic development efforts to get the ball rolling. Action items might include an asset mapping exercise, business retention and expansion program specifically geared towards the agricultural sector, or a community-wide strategic planning exercise. There's no time like the present... (Alison Davis)



H2A Record Keeping Requirements

Many farmers despise paperwork, but if they utilize the federal H2A program, paperwork is an ever-increasing part of their job. Without the temporary agriculture workers the H2A program provides, many of the state's tobacco farmers would have difficulties producing a crop. Farmers who utilize this program are well aware of the housing, transportation and tool requirements.

Generally, farmers have done a good job of completing those requirements. Recently the Department of Labor (DOL) began more stringent labor audits. Several of the audits resulted in fines being issued by the DOL. The primary goal of record keeping is to be prepared for any audits that may follow; for that reason, it is necessary that farmers keep up-to-date on any and all records that may be required. Below is a good list of these requirements.

Items to keep in the employee file of H2A workers

- Copy of the contract, specifying wage rate or piece rate wage, contract length, etc.
- Copy of the visa and passport; some farmers find it beneficial to keep these for their workers during the contract time frame
- Copy of the Social Security Number
- Foreign address

Items to keep in resident employees' files

- Up-to-date address; we find it beneficial to have the employee fill out a form when they start employment
- I-9; proof of citizenship
- W-4; form designating employee's federal tax situation (exemptions, status, etc). Needs to be updated yearly.
- K-4; Kentucky form designating state tax situation. This also needs to be updated yearly

Most producers are keeping this information, but that information alone will not satisfy a DOL labor audit. Payroll forms are another area where farmers must be certain that they provide sufficient information to their employees. It is common practice for farmers to write a check to the employee with the hours worked in the

memo line. This may satisfy the employees, but it does not satisfy the DOL requirements. Employees must be provided the following on their paystub or other statement.

- Farm name they are under contract with
- Farm address
- Farm tax identification number normally an Employee Identification Number (EIN)
- Employee's name
- Employee's **Foreign Address**
- Employee's Social Security Number
- Number of hours worked
- Wage Rate or Piece Rate, which ever applies
- If more hours were offered to then employee than they worked that needs to be noted

Lastly, it is mandatory that U.S. Citizens completing the same tasks need to have a higher wage rate than the H2A workers. A copy of this information should be kept by the employer as well. If you would like more information on requirements please visit the DOL website at www.dol.gov/whd/. (Evan Conrad)

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Bldg.
Lexington, KY 40546-0276
Phone: 859-257-5762
Fax: 859-323-1913
<http://www.ca.uky.edu/agecon/index.php>