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Excerpts from “*Silvopasture Economics: Three Case Studies*”

**Presented by Larry Godsey, PhD - Center for Agroforestry at the U. of Missouri –
at the *Northeast Silvopasture Conference*, November 8th 2011- Watkins Glen, NY**

The Impact of Shade on Weight Gain

- Beef cattle with shade had the following increases during late Spring and early Summer (University of Kentucky Animal Research Center):
 - 1.25 lbs/day for cows
 - 0.41 lbs/day for calves
 - 0.89 lbs/day for steers
- Cattle grazing on endophyte-infected pastures with shade gained 0.72 lbs/day over those without shade (University of Missouri).
- Cattle with shade had an ADG that was 20% more than cattle without shade (University of Arkansas).

The Impact of Shade on Milk Production

- Dairy cows provided with shade produced 10-19% more milk than non-shaded cows (University of Florida)
- When temperatures exceed 90°F, milk production can decrease by 20 to 30% (10-25 lbs. of milk per day) (Virginia Tech. University).
- Cows that were shaded produced up to 9 lbs. more milk per day over non-shaded cows.

The Impact of Shade on Reproduction and Fertility

- Cattle provided with shade had conception rates of 44.4%, as compared to conception rates of 25.3% for cattle without shade (University of Florida).

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The Tomazi Farm (MO)

- 210 acres divided into 31 paddocks
- 6 - 9 acres each paddock
- 84 head cow/calf operation
- Rotational grazing system
- Reason for adopting silvopasture:
 - Improved weight gain in the heat of the summer,
 - Increased grass acreage without purchasing or renting (put non-productive land into production)

Economic Analysis:

- From June 15 – Aug 15, 2010
- ADG (avg. daily gain): 1.6 - 2.1 lbs/hd/day
- (Typical ADG: 0 –(- 1) lb/hd/day)
- \cong 96 – 126 lbs/hd

- \$130 - \$170/hd
- \$10,920 - \$14,280 increase in profit
- The silvopasture edges are estimated to cost about \$1200/acre (\$3,500 total).
- B/C ratio: 3.12 – 4.08**