Seasonal Prices for Small Ruminants in Tennessee

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Price seasonality refers to the typical price pattern within a year. Agricultural commodities often follow seasonal price trends, and the case is no different for small ruminant animals. Meat goat and sheep prices experience seasonal changes throughout any given year. Some years, market prices follow the seasonal pattern closely, while other years, deviations may occur. However, understanding the dynamics of seasonal price trends is an integral component of successful marketing for both meat goat and sheep enterprises.





Seasonality Determinants

easonality of prices is largely dependent on the biological production process and producer practices which determine supply. Thus, meat goat and sheep prices are influenced by the natural production cycle. The natural production cycle for meat goats and sheep results in females either kidding or lambing in late winter to early spring. Therefore, price patterns are largely influenced by animal supply and availability throughout the year. Prices for meat goats and sheep tend to be higher in the spring when few meat goat kids and lambs are available, and prices trend down after the kidding and lambing season is in full swing.

Not only is supply of animals a major influence to price seasonality, but meat demand also plays a significant role. There are several ethnic groups present in the United States that consume goat meat including Hispanic/Latino, Muslim, Somalis, Jamaican/ Caribbean, Asian, Jewish, Christian Roman/ Western and Christian Greek/Eastern. Consumption of goat meat is tied to religious and cultural traditions. This is not to say that others do not consume goat meat, but the aforementioned ethnicities tend to have the largest demand. Demand for lamb has similar characteristics to goat meat as it relates to ethnic demand, but lamb also has a fairly strong demand as a luxury meat and can often be found on menus in fine dining establishments.

Meat demand tied to religions and cultures results in seasonal demand which may vary from one year to the next. It also results in distinct preferences for certain product characteristics. Table 1 lists several religious and cultural holidays in which sheep or meat goats are sought. Producers may want to consider these holidays as they plan the breeding season and marketing schedule.



Table 1. Holidays and Cultural Traditions in which Meat Goats and Sheep are Utilized ^a		
Holiday	Time of Year	Preferred Animal
New Year's Day	Jan 1	Milk-fed meat goat kids and lambs
Passover (Pesach)	Mar/Apr	30- to 55-pound milk-fed and fat lamb
Western Roman Easter	Mar/Apr	30- to 45-pound milk-fed and fat lamb; 3 months old or younger, fleshy milk-fed meat goat kids weighing 20 to 50 pounds
Eastern Orthodox Easter	Apr/May	40- to 55-pound milk-fed and fat lamb; 3 months old or younger, fleshy milk-fed meat goat kids weighing 35 pounds
Mother's Day	May	Suckling lambs and meat goat kids; 45- to 60-pound weaned market lambs and meat goat kids
Cinco de Mayo	May	15- to 30-pound suckling meat goat kids
Start of Ramadan	Jun/Jul	60- to 80-pound weaned market lamb; 60-pound meat goat kids less than 12 months of age
Independence Day	Jul	Suckling lambs and meat goat kids for small parties and 55- to 120-pound weaned lambs for large parties
Id al Fitr (The Festival of the Breaking of the Rama- dan Fast)	Jul/Aug	60- to 80-pound weaned market lamb; 60-pound meat goat kids less than 12 months of age
Caribbean Holidays (Car- nival, Carifest, Jamaican Independence Day, etc.)	Aug	60- to 80-pound bucks
Rosh Hashanah	Sep/Oct	Forequarters from weaned 60- to 110-pound lambs
Id al Adha (Islamic Festival of Sacrifice, Eid)	Sep/Oct	60- to 80-pound lambs; yearling goats or large meat goat kids weighing 60 to 100 pounds
Muharramn (Islamic New Year)	Oct/Nov	60- to 80-pound weaned market lamb; 60-pound meat goat kids less than 12 months of age
Diwali (Festival of Lights)	Oct/Nov	No specification for meat type
Christmas ª http://sheepgoatmarketing	Dec	Milk-fed meat goat kids and lambs

<u>a http://sheepgoatmarketing.info/calendar.php</u>

Seasonality Graphs

igures 1, 2 and 3 are price seasonality graphs for meat goat kids, meat goat cull breeding stock, and sheep and lamb, respectively. The price seasonality graphs were constructed using Tennessee price data in nominal dollars from 2006 to 2015 for meat goat kids and meat goat cull breeding stock, while sheep and lamb price data ranged from 2011 to 2015. Seasonality graphs can be interpreted such that 100 percent represents the annual average price for the animal. For example, using figure 1, selection 1: meat goat kids weighing 66 to 80 pounds generally have a price in February that is 6 percent above the annual average, while in October their price is generally 13 percent below the annual average. Similarly, figure 3 shows the price for choice and prime lambs weighing

between 40 and 60 pounds in January is generally 28 percent above the annual average, while the price of those animals reaches its lowest point in June and is 13 percent below the annual average.

In general, the prices of lighter-weight animals peak earlier in the year, and prices of heavier animals peak progressively later due to the extra time necessary to grow the animals to heavier weights. Additionally, the variation in price throughout the year, relative to the annual average price, tends to be smaller the heavier the animals are at the time of marketing.







Figure 2. Meat goat cull breeding stock seasonal price index for Tennessee from 2006-2015.



Figure 3. Sheep and lamb seasonal price index for Tennessee from 2011-2015.

Conclusions

Prices in a specific year do not always follow the seasonal pattern; however, the seasonal price index provides useful information regarding long-term price patterns. The use of the seasonal price index can help producers plan a marketing strategy as well as adjust production to meet that marketing strategy. Some producers may change breeding seasons to achieve a certain weight meat goat kid or lamb at a specific time of year to capitalize on higher prices. Alternatively, other producers may choose to maintain the traditional breeding season which matches natural production cycles with available forage and nutrients. Regardless of the breeding season or the kidding or lambing season, producers must remember that profits are equal to the price, times the weight, minus the cost. Whatever production strategy, maximizing profits is desirable. Seasonal price indices are just one tool to aid the decision-making process.

References

Cornell University. 2016. Sheep and Goat Marketing. Animal Science Department, Cornell University. Online: <u>http://sheepgoatmarketing.info/index.php#&panel1-1</u>.

Jones, J.J. and K.C. Raper. 2008. Meat Goat Marketing and Price Seasonality. Oklahoma Cooperative Extension Service, Oklahoma State University. Stillwater, Oklahoma. AGEC-622. Online: <u>http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-7530/AGEC-622pod2015.pdf</u>.

Rashid, M. 2013. Sheep and Goat Market Demand Information. Manitoba Agriculture, Food and Rural Development. Online: <u>https://www.gov.mb.ca/agriculture/livestock/production/sheep/pubs/ethnic-holiday-calendar-for-lambs-and-goats.pdf.</u>

Solaiman, S.G. 2007. Assessment of the Meat Goat Industry and Future Outlook for U.S. Small Farms. Tuskegee University. Tuskegee, Alabama. Online: <u>http://www.agmrc.org/</u> media/cms/USGoatProductionFinal_E1367962C32D1.pdf.

United States Department of Agriculture and Tennessee Department of Agriculture – Market News. 2016. Tennessee Sheep and Goat Auction. Online: <u>https://www.ams.usda.</u> <u>gov/mnreports/nv_ls320.txt.</u>



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