

**Cattle Business in Mississippi – March 2013**  
**“Beef Production Strategies” article**

**Managing Other Livestock Species with Cattle**

*Jane Parish – Extension Beef Cattle Specialist, Mississippi State University*

According to a 2011 survey of beef cattle producers conducted by the Mississippi State University Extension Service, several other animal species are found on beef cattle operations in Mississippi and other southeastern U.S. states. The following percentages of the 79 Mississippi survey respondents conducted other animal agriculture enterprises: 15.2% horses, 6.3% goats, 5.1% poultry, 2.5% swine, and 1.3% sheep. Of the 115 respondents from other southeastern U.S. states, the following percentages conducted other animal agriculture enterprises: 17.4% horses, 7.0% poultry, 3.5% goats, 1.7% dairy cattle, 1.7% aquaculture, 0.9% sheep, and 0.9% swine. Thus, it is useful to understand the special management considerations that are needed when managing multiple animal species on one farm.

**Resource Allocation**

When managing multiple animal agriculture enterprises on a single operation, there are both pros and cons. First, there are complementary aspects of some enterprise combinations. Poultry litter can be used as fertilizer on pastures and serve as a valuable input for grazing enterprises. Because goats readily consume a wider range of plants than cattle including course weeds and brush, they can improve forage utilization and weed control when grazed in the same areas as cattle. Managing multiple animal enterprises may also help to smooth out cash flow in the operation if complementary marketing seasons are used. Economic risk is spread out with a diversified operation. If one enterprise is not profitable, another might provide better net returns.

One of the major challenges in managing multiple animal agriculture enterprises together is having to decide which enterprise gets what amount of shared inputs. It may also make separation by enterprise of production and financial information more difficult if it is not clear what enterprise used what amount of a certain resource. Grazing cattle and small ruminant livestock simultaneously on the same pastures may have its advantages, but informed calculations and estimations are needed to determine the appropriate shares of pasture-related costs to each enterprise. Without good information and reasonable resource use allocation by enterprise, one enterprise may appear to be more or less profitable than it really is and vice-versa for another enterprise.

Proper management of all animal species raised on the agricultural operation is needed. A manager or laborer might be adept at working with one species of livestock and not as comfortable in his or her skills managing another species. Just because one enterprise is productive and profitable under certain management, do not assume that the same management will have comparable results with another livestock species. Due diligence is prudent before expanding to new animal agriculture enterprises. Will the new enterprise work with the existing business model? Make sure that the appropriate education and training are acquired by managers and other farm personnel to be

prepared to provide good animal husbandry to all livestock species on an operation. Then assess human expertise by livestock species and management area, and know when to assign certain decisions and tasks to the person(s) best suited to handle them.

### **Species-specific Resource Use**

Although many resources can be shared among various animal agriculture enterprises, some should be restricted to certain species. As an example, sheep are very susceptible to copper toxicity. Mineral supplements containing copper that are labeled for use in cattle may not be appropriate for use in areas where sheep may access them. In fact, many product labels will specifically state the risk to sheep of copper toxicity. So, the options are to only use products labeled for both species if used in areas accessible to both livestock species or to separate species and product access accordingly.

Another case in point of commonly used products in cattle production that pose a risk to other grazing animals is ionophores. Poisoning from overconsumption of monensin (trade name, *Rumensin*), for instance, can occur in cattle. That is why it is critical to make sure that safe feeding levels are used and feed mixing errors do not take place when adding ionophores to supplements. The toxic dose of monensin for horses is about one-tenth of that for cattle on a per pound of body weight basis. For horses, even minor exposure to monensin or lasalocid (trade name, *Bovatec*) can be a problem. Obviously, horses should not have access to cattle products containing ionophores. Additionally, feed mixing, storage, delivery, and feeding equipment that could be a source for contamination of feed with traces of ionophores must not be shared or must be thoroughly cleaned between use for horse feeds and ionophore-containing cattle feeds.

Importantly, use animal health products, such as vaccines, medications, or parasite control products, as directed on the label and via veterinary consultation. Extralabel use of animal health products for other species may be both unsafe and illegal. Good information on extralabel drug use and its restrictions is online at [www.avma.org/issues/drugs/ELDU\\_AMDUCA\\_faq.asp](http://www.avma.org/issues/drugs/ELDU_AMDUCA_faq.asp).

It may be tempting to cut costs by modifying animal housing and handling facilities that were designed for one livestock species to be used with another livestock species. In some cases, facilities can be effectively and efficiently modified to meet the needs of multiple livestock species. In other situations, some facilities may need to be designed and used for specific animal species. Woven wire fencing may work well for sheep and goats, but a top electric or barbed wire is typically needed with cattle. Practical wire or board spacings for fences and facilities also differ by livestock species, with smaller animals needing more closely spaced wires or boards and less space under the bottom board or wire and the ground. Alleyways that are the perfect width for cattle will be too wide for small ruminants, allowing them to turn around backwards. Make sure that the design requirements are met for all species for which the facilities will be used. This is important for creating both safe and effective facilities.

For more information about beef cattle production, contact an office of the Mississippi State University Extension Service or visit [msucares.com/livestock/beef](http://msucares.com/livestock/beef). Small ruminant, dairy cattle, and equine information are also available on MSUcares.com at [msucares.com/livestock](http://msucares.com/livestock).