## VANAGING <br> MUHTSPECIES

# Goats, Sheep, Cattle, Guardian animals and Other Livestock 

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Beauty is in the eye of the beholder, so it is important for every producer to know his/her vision. Consider your vision with every decision- every time you make a purchase or pursue an activity ask if the decision will lead you closer to your vision. Here are a series of questions to consider when stocking your land:

## 1. Why should you consider adding multi-

 species of livestock to your operation? Different species have different preferences for forage and most species are not susceptible to the same internal parasites so they reduce the threat of infection. The University of Idaho did a study and found that adding sheep to a cattle operation will increase meat production by $24 \%$ because shorter gestation of small ruminants allows producers to increase herd numbers and improve genetics more quickly.2. What is the existing vegetation/ forage on your property? Different species of livestock have different
vegetative preferences so it is important to inventory the forage you have before deciding what species of livestock best suits your property. Goats are the best browsers, so if you have briars, privet and multiflora rose, you predominately need goats. Sheep prefer clover and other herbaceous broadleaf forbs. Cattle prefer grass and clover. Horses prefer grass. In the end they will all eat some of whatever is present but could be happier and perform better on their preferred forage. Proportions of livestock will likely need to change overtime. Goats are the most likely species to browse out their preferred vegetation especially where a lax rotation is practiced.
3. What kind of fence is present/needed? The type of fence needed is very dependent on the amount of pressure placed on the fence and how much money you are willing to spend. Woven wire is the most expensive but least maintenance. On the other hand, the high tensile electric is the least expensive yet you need to keep vegetation controlled so the charge is 3,500 volts or more, thus meaning lots of maintenance.

Current cattle producers may want to consider just improving the property line or border fences so they can add sheep or goats. This may be the most cost effective way to add small
ruminants, but be sure to keep stocking rates in mind. Do not stock more than 2 goats for every cow, or 1 ewe for every 2 cows. The small ruminants will perform very well, you won't have much extra cost in infrastructure and your pastures will benefit from some weed control.

Tips for different types of fencing:

- Small ruminants, especially goats, require a more substantial fence. If you graze close or push your animals in a tight area, a stronger fence is needed.
- If the existing fence is woven wire, you can run most any livestock. Six inch mesh woven wire is also called goat killer wire as the horns go in but don't come out easily To eliminate or reduce that problem, install an offset electric wire about $10^{\prime \prime}$ above the ground. Old woven wire can be given an increased life span by placing an offset electric fence wire or two on it.
- If barbed wire is present, you could add more barbed wire and make sure it is real tight. Spacing of the bottom wires is especially important. A spacing of 3 inches between tight wires with a post every 8 feet, or closer, can work, or off set with electric wires (generally 3). NRCS doesn't recommend mixing electric fencing with barbed wire because if
an animal gets entangled, they can thrash themselves to death.
- For electric fencing, you will need the bottom wire 6 to 8 " above the ground. The spacing of other wires is dependent on how many wires you run. If you rotate often and have a good charge on the fence, you can use 3 or less strands of wire with a spacing from the ground of 8 ", 8 ", and $12^{\prime \prime}$. If it is a perimeter fence, 5 strands would be preferred with a spacing from the ground of 7 ", 7 ", 8 ", 10 ", and 10 ".
- Fixed knot woven wire is the latest and greatest fence as the cost is reduced since post can be spaced $25^{\prime}$ apart.

4. How should you introduce new animals to the herd or flock? Introduce new animals by running them beside the existing herd or flock. I like to place the new species in a corral or secure area for a few days adjacent to the existing herd. Then when mixing the two herds together, turn into a big paddock so they have room to segregate if desired. Some folks like to put a few of the existing herd into the pen with the new stock. Guardian animals are the most likely to cause issues when combining species. Watch the stock closely for the first few hours and days. When new animals arrive, if you use electric fencing, initiate the new stock to electric fence in the corral or another secure area.
5. What if you have limited resources like shade and water? Cattle are the most dominant and will demand their share, and possibly more, if shade is limited. Goats are next in the pecking order and sheep are lowest of the three species. My example of sheep being knocked away from a limited resource is when using rolls of hay- as soon as the roll is in the field, the sheep would flock to it, but within 30 minutes only cows would be around the hay. To help provide the sheep with hay, we now we unroll enough hay for stock to clean up in 12 hours and all species have room to eat.
6. How do you manage different mineral requirements for different species? Cattle mineral with high copper can be fed in hanging cut out barrels. Sheep mineral can be fed behind an electric fence wire about 34 inches above the ground, or access to mineral can be made through a small cut out in a welded wire panel.
7. How do you provide shelter for the small ruminants? Shelter is important for small ruminants, especially goats, if the birthing date is in real cold weather. However, if the birthing date is April or later, shelter can be a break of woods. Too little shelter can cause more issues than no shelter. Goat kids can pile up in shelter and smother each other; lambs sometimes do that too. Drafty shelter is not good either. A south facing slope is good in late winter.
8. Is it best to run all the species together or separate? I like one herd for the simplicity of management. One herd takes less paddocks and the grass recovery (regrowth) period is longer so you can grow more grass. If you run stock separate, forward grazing would be ideal. Forward grazing is allowing the calves and sheep to graze in front of the cows in order to provide the best forage for the growing and most nutritionally demanding livestock. The ideal rotation would be for both herds to move every one or two days. If they grazed longer, the grass would be overgrazed and have lower production.
9. How do you separate the sheep and or goats from the cattle when you need to work them in a corral? In general they naturally segregate some, but you can hold the cattle back with a high wire or board. If some cattle get mixed, give them a few minutes to settle and then you can separate them easily. A spring gate or bungee wire work well for me.
10. How is best to manage the guardian animals? I like two or more guardian dogs for all flocks and another dog for every 50 ewes. So, for a flock of 200 , I like to run four to eight dogs, but it is very variable
depending on terrain, number of herds and predator pressure. I now feed dogs with self-feeders on the opposite side of a gate. The dogs are more nimble and can crawl through a gate. If you have multiple dogs, some will be dominant so multiple feeders will likely be needed. Donkeys can be good too, but I only want one donkey for every flock.
11. What about running poultry on the same land? Poultry would definitely benefit a multi-species grazing operation. The biggest benefit would be breaking the fly and worm cycle by moving the poultry into the pasture 3 days after the ruminants move off. It would take a lot of poultry to cover the land grazed by ruminants, but the manure from the poultry would benefit grass production. Labor and feed cost need to be considered before adding poultry.

In summary always keep your overall goal in mind, and keep the operation simple and manageable.

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