

Best of OP – Managing Multi-Species Grazing

By [Sandra Kay Miller](#) / July 1, 2019 / [No Comments](#)

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On old MacDonald’s Farm, there were all types of animals—here a moo, there an oink and over there a cluck, cluck—but managing multiple species and the pastures that support them in a forage-based environment is more akin to a complex symphony with you, the farmer, as the conductor. Regardless of the players (aka: species), there are five major sections of a diversified farm that must be well managed for success.

While multiple forage systems are the foundation to any pasture-centric operation, the key to diversified livestock production is infrastructure overlap. By this I mean that capital investments such as fencing , housing, water and handling systems pertain to more than a single species.

Forage



Yum! Poo!

Not all plants are created equal. What may be considered highly nutritious, pristine forage for one species may not provide adequate feed for another. Similarly, the woodlot full of dense undergrowth of invasive plants may be a highly coveted feedstock for a farmer willing to look beyond traditional forages. Furthermore, not all forages are plant-based.

Consider a fetid cow pie covered in bugs. While herbivores will give a wide berth to one when grazing, that same pile of poo is a veritable smorgasbord for poultry and pigs making it every bit a source of forage as a stand of grass or legumes and is equally manageable to gain the most amount of nutrients.

Fencing



Photo by Sandra Kay Miller

The adage that fences need to be horse high, pig tight and bull strong doesn't begin to cover enough ground when planning to produce more than one or two types of livestock, but it's a good start. Fencing serves a variety of purposes—to keep animals in, predators out and neighbors happy. But in a highly-managed forage-based operation, fencing is also critical to ensure animals are eating in a specific area.

There are many factors that go into determining what type of fence to utilize and its configuration. For example, although one or two strands of electric wire may be adequate for cattle and pigs, the height is critical to the successful containment of each.

Electric net fencing has become one of the most versatile pieces of equipment on diversified farms. Highly configurable and easily moved, no farm should be without at least one roll. By starting with netting, many new & beginning farmers are able to get a jump-start on their livestock and poultry ventures without having to make a huge expenditure in building permanent enclosures as it will hold everything from pastured poultry to full grown cattle.



Animals strip-grazing in pasture divided with portable electric fencing. Photo by Sandra Kay Miller

When planning for fencing, instead of looking only at existing or potential species, instead consider the function for the enclosed areas. For example, large permanent pastures are fenced with multi-strand high-tensile electric wire to accommodate numerous species. Seasonal sacrifice paddocks, areas for housing breeding males or very young stock can be constructed of woven wire for more secure enclosures. Permanent perimeters can be subdivided into smaller parcels using step-in posts, poly-wire, electric netting or feed lot panels.

Fair warning for using only electric fencing—in the event of power loss or unexpected damage such as trees or branching falling on the wires during inclement weather—you will have to have a back-up plan or you'll be chasing critters on the loose.

Shelter



Pig Shelter. Photo by Sandra Kay Miller

Livestock need shelter for a number of reasons—to stay dry, out of the wind, shaded and safe from overhead predators. Depending on the species you choose to raise, shelters can be as simple as a good stand of trees in a woodlot to permanent complete with individual stalls. And while the latter is always desirable, it's not always practical or preferable.

Cattle, sheep, goats, pigs, camelids, horses and poultry are a hardy lot despite our domestication. We often anthropomorphize them much to their own demise by cooping them up in barns during inclement weather subjecting them to diseases caused by overcrowding and confinement.

Despite unlimited access to shelters, farmers often find their animals grazing in the pouring rain and standing in the midst of a snowstorm, but when the seasons turn to scorching heat, no matter what the species, all will head for shade. Heat will kill animals faster than cold weather.



Hoop house for used pastured turkeys and nine other species. Photo by Sandra Kay Miller

I'm a big fan of portable shelters without floors. When they get filled with soiled bedding and manure, simply move them; no mucking, no need for heavy equipment with a bucket and they can be moved from one area to another for rotational grazing and browsing, reducing the need for multiple structures.

Similarly, consider shelters that can be utilized by multiple species such as three-sided run-in sheds and huts. The size of the shelter should also correlate with the maximum size of the largest livestock you plan to raise. Small ruminants, calves and pigs do not need structures tall enough to house full-sized cattle or horses and shelters for poultry can be even lower.

Handling Equipment

One of the best lessons I was taught from the beginning was to make as much of the handling equipment as portable as possible since several of the connecting ranches on which I worked were leased by my employer. Although I coveted the fancy stock handling systems in the glossy catalogs, his words of wisdom held fast when I was faced with needing a structurally sound way of safely handling and loading livestock on my own farm.

While it may have been nice to have an automatic squeeze catch chute with a headgate, I have accomplished the handling requisites (including for one very nasty yak with a big set of horns) with both portable feedlot and corral panels fastened with a few lines of chain and safety snap links. Those same panels have also been used for loading chutes, catch pens, quarantine pens, portable pens and paddock dividers.

Water

By far, the most challenging aspects of a multi-species operation is water. While year-round natural water sources such as streams, lakes, ponds and springs are ideal, rarely are they possible for every location of an intensively managed grazing and browsing operation. Plus, the damage to waterside habitats and water quality can be adversely affected by livestock's unfettered access.

There are a number of issues to take into consideration for watering a multi-species farm—the height of each animal (both adults and juveniles), the number of animals accessing the water source and one thing that many folks often overlook especially when adding fowl—cleanliness.

If your property is located in an area that experiences freezing temperatures for a significant part of the year, access to water for all species becomes even more of a challenge. For example, pig water nipples and poultry bell waterers are difficult to keep free-flowing yet allowing them access to communal water tanks can wreak havoc. Ruminants will not drink from water sources excessively fouled by poultry or swine.

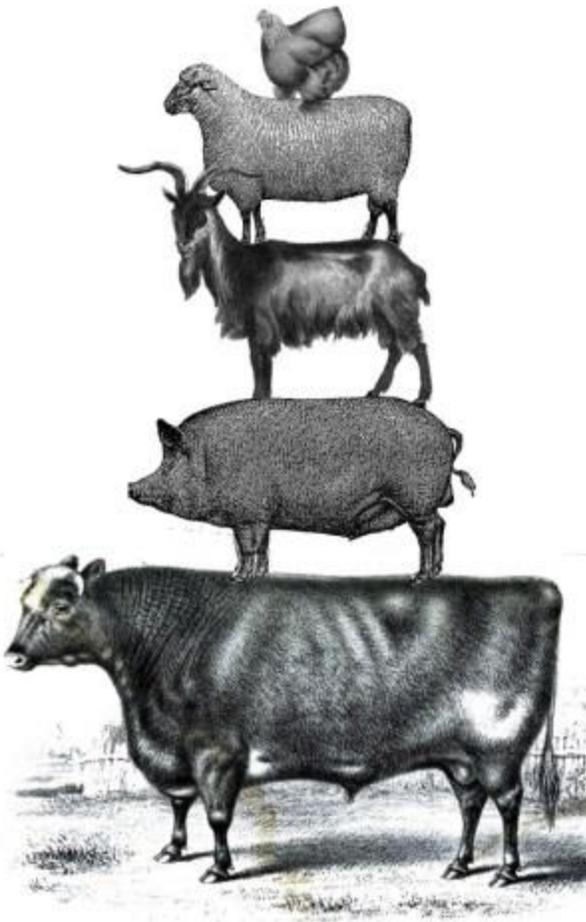


Illustration by Kathy Voth

Diversify Smartly

When considering adding new species to your existing farm, ask yourself what you hope to accomplish. Revenue generation generally tops the list, but expense reduction should also be factored into the numbers.

For example, adding meat goats to a pasture overrun with invasive species will not only provide a return when harvested, but will also reduce the amount of labor and inputs spent on controlling the weeds. Pigs work great for reclaiming overgrown meadows and woodlots or for “pig-otilling” areas cultivated for vegetables. Marginal grasslands where chicken tractors have gone over quickly turn to lush, green carpets. Sheep will “mow” down to the ground in rows between fruit trees, vines and canes.

But don't automatically think you need to go out and purchase breeding stock for your diversification project. This is the biggest (and often the most expensive) mistake that can be made as your time to market and overall investment will be much longer compared to purchasing young stock from a reputable and knowledgeable source. Not only will

starting out this way deliver a faster return on your money, but will also soften the learning curve on new species you may have never handled or marketed.

How many farmers have had to learn the hard way how pigs root up pastureland in the summer and chickens will turn it into a dirt lot in the winter? Or that all species have their own particular places for wallowing, dusting, loafing and rubbing that interferes with our ideas of pristine fields and fence lines? Ultimately, the key to successful diversified livestock production is understanding each species' natural behaviors and how that affects your forages and land during each season.