

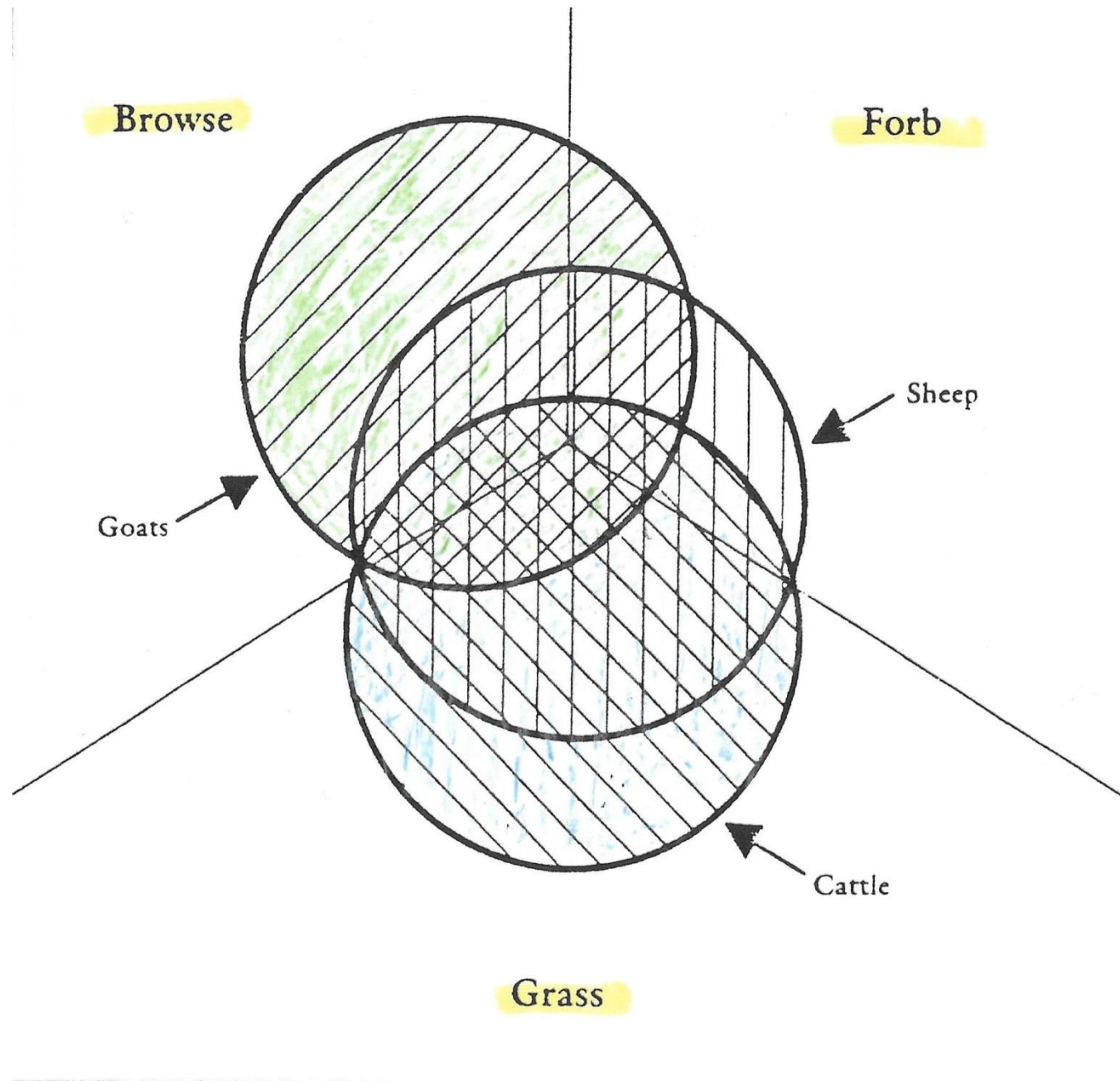
Multi-Species Grazing to Control Sericea and Brush

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Multi-Species Grazing

- What is it?
- Grazing more than one animal species together on a pasture or range.
- Cattle + horses, or sheep, or goats, or deer
- Why?
- Pastures and Range grow a diversity of plants-grasses of various kinds, legumes, forbs-broadleaf weeds good and bad and woody species. Diversity is good for yield and yield stability, insect and disease resistance, draught tolerance and soil health.
- Problem any one animal species does not consume all species.



Solutions to Diversity of Forage

- When a plant class is not consumed, it dominates the pasture and reduces biodiversity. That is the reason pastures grazed by cattle only become brushy and weedy.
- Past solutions to this problem have been burning and spraying herbicide to reduce competition by these ungrazed species.
- Burning suppresses most brushy species, but thickens sericea lespedeza. There is always a hazard when burning.
- Herbicide often kills some preferred species as well as target species. Cost is often a problem and need for repeat application

Multi-Species Grazing

- Using an animal species that consumes those species that are ungrazed and increasing, which will control those species and restore biodiversity.
- For example, goats love sericea lespedeza, so with sufficient goats, they will reduce the amount of sericea lespedeza and grasses then can compete with the sericea and replace it over time.
- This is not an overnight fix, but spraying isn't either in the long term. Neither goats nor herbicide will eradicate sericea, it will continue to be present and control will have to be applied indefinitely.



Sericea Lespedeza Control

- Expensive chemical control partial relief
- Treat every 2-3 years
- Chemical control not economic
- Three years of hard grazing (60-80% utilization) to kill perennial plants
- Great reduction in seeding rate
- After grazing by goats, only short stem stubs were left at end of season.
- Sheep will consume sericea, but not as much as goats.

Sericea Lespedeza Control

- Stocker goats grazed at 4 hd/ac gained 22 lbs/hd, \$5.00 profit/hd, \$20/ac.
- Lespedeza is the best goat forage
- Need for early intervention to prevent seed production
- Goats also controlled honey locust, sumac, eastern red cedar, plum, blackberry, elm, buckbrush, wild rose, dogwood, Osage orange

Hair Sheep

- Do not have wool and so do not need shearing
- Some breeds are very worm resistant
- Hair sheep are easy to manage-old man's sheep
- Hair sheep consume most broadleaf weeds, including ragweed.
- Consume significant browse only to shoulder height

Goats for Brush Control

- Goats love brush almost as much as they love sericea lespedeza
- Goats will stand on their rear legs and consume leaves up to 5-6 ft high, leaving a browse line that you can see under.
- Goats will debark some trees such as black and honey locust and kill them the first year.
- Goats will kill smaller brush in only a few years. Bigger brush will take longer.

Plant Species Controlled by Goats

- What did they learn to eat as a kid
- Goats consume 90% of herbaceous and woody species
- They do not consume Mullein and little bermudagrass
- Most preferred species blackberry, sericea lespedeza, green briar, sumac, winged elm, poison ivy, ironweed and kudzu.

Woody Species Controlled by Goats

- Moderately preferred species post oak, blackjack oak, multiflora rose, sunflower, ragweed, buckbrush, hickory, hawthorne, giant ragweed, tall thistle and Eastern red cedar
- Lesser preferred species Osage orange, Illinois bundleflower, and hackberry.
- Caution, goats are illiterate and did not read my list. Apparently some plant species taste different grown in different areas, especially red cedar, but also sumac and winged elm.













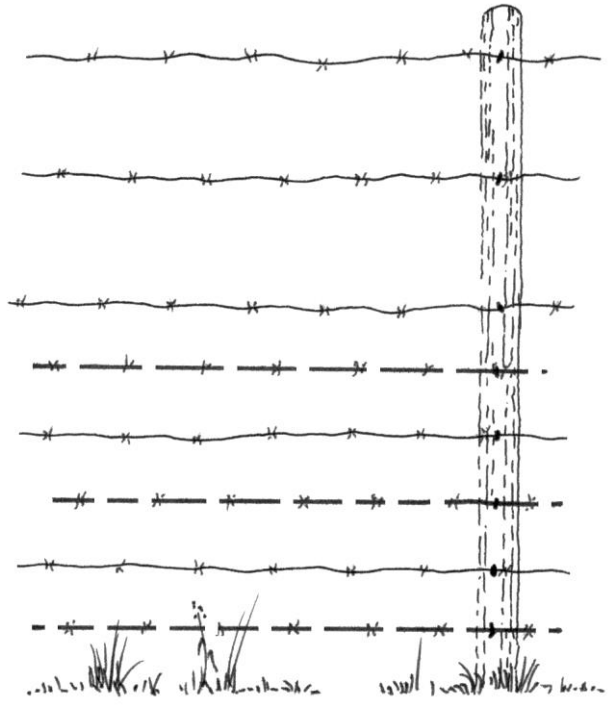


Co-species Grazing

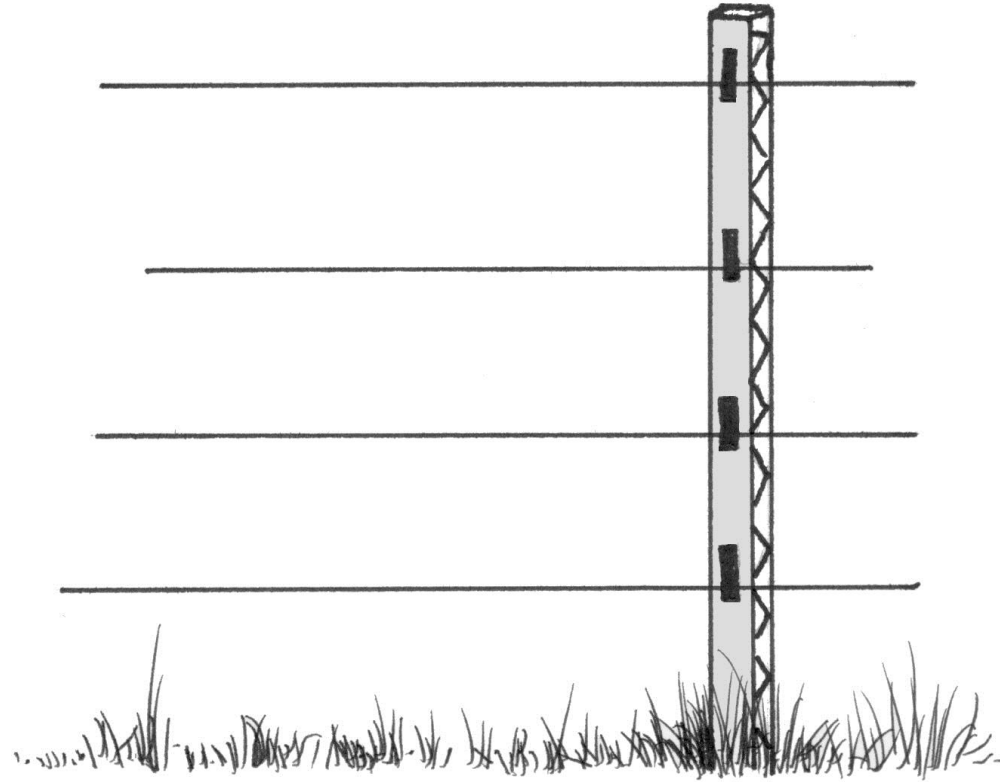
- Facility changes for co-species grazing
- Perimeter fencing modified
- Parasite problems
- Predators
- Waterers modified
- Working facilities changes

Converting 5 strand Barbed Wire

- Add 2 or 3 strands barbed wire down low so that there is no gap bigger than 7" in the lower 30" Try to get lower strand within 5" of ground. Goats go out low!
- Use tie wires between post.
- Cheaper than putting up a new fence and can work well, but requires a fair amount of labor

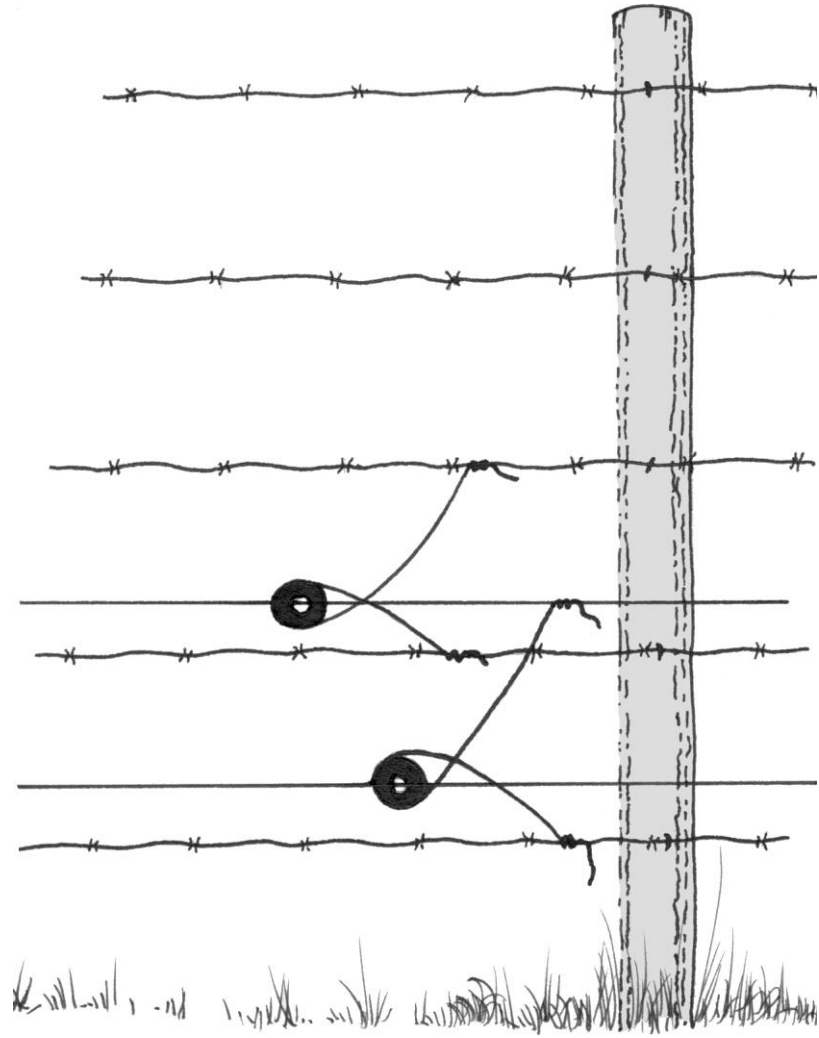


Four Strand Electric Fence



Converting Barbed Wire Fence

- Put 2 strands of electric fence 8 and 18" from the ground and 8" out
- Can be mounted on standoff insulators, step in posts or fiberglass sucker rods
- Work well, but must control vegetation



Predators

- Ten thousand coyotes voted goat meat as the best.
- However, the local dogs cause the most kills.
- A guard donkey can be effective at preventing predation. Several cattle people use them to prevent predation on calves.
- Guard dogs work well, require dogfood daily, but can be very effective.
- Electric fence can help

Parasites (Worms)

- Problem when animals are grazing close to the ground
- Do not need dewormed when browsing brush
- Sericea lespedeza has deworming qualities and goats or sheep do not need dewormed when grazing on it.
- Need to check eyes for anemia for deworming
- Take a parasite management class online or at Langston
- Dewormer resistance in goats is a big problem requiring two or three dewormer combinations in some cases.

Goat Information

- “The only reason God made a goat was to eat brush” Maurice Shelton
- A goat will convert unwanted vegetation into a saleable product at a profit.
- Goats can be sold at Leach, OK, Pawnee, OK, Chickasha, OK, Gainsville, TX, Paris, TX, Hamilton, TX, Hope, AR.
- Price for a 60 lb kid is \$3.00/lb. For \$180., you can support a doe for 12 months and pocket \$20-50/hd. Half of them have twins which are much more profitable.
- A Texas homily is “Ranchers have cattle and horses for reputation and sheep and goats for finances.”

Goat Information

- Langston Goat will get you to our website with an online goat course and we have the 'Bible' on goat production.
- Pennsylvania has a brief online course on goat production
- Lots of information and disinformation on goats on the internet
- Visit with goat producers, but realize that $\frac{3}{4}$ of goats are pet, show or hobby which is not what you want. Find a commercial goat person through your county ag educator, local feed store or word of mouth.

Conclusion

- Adding sheep or goats to cattle can be beneficial to control unwanted vegetation as well as beneficial to the bottom line.