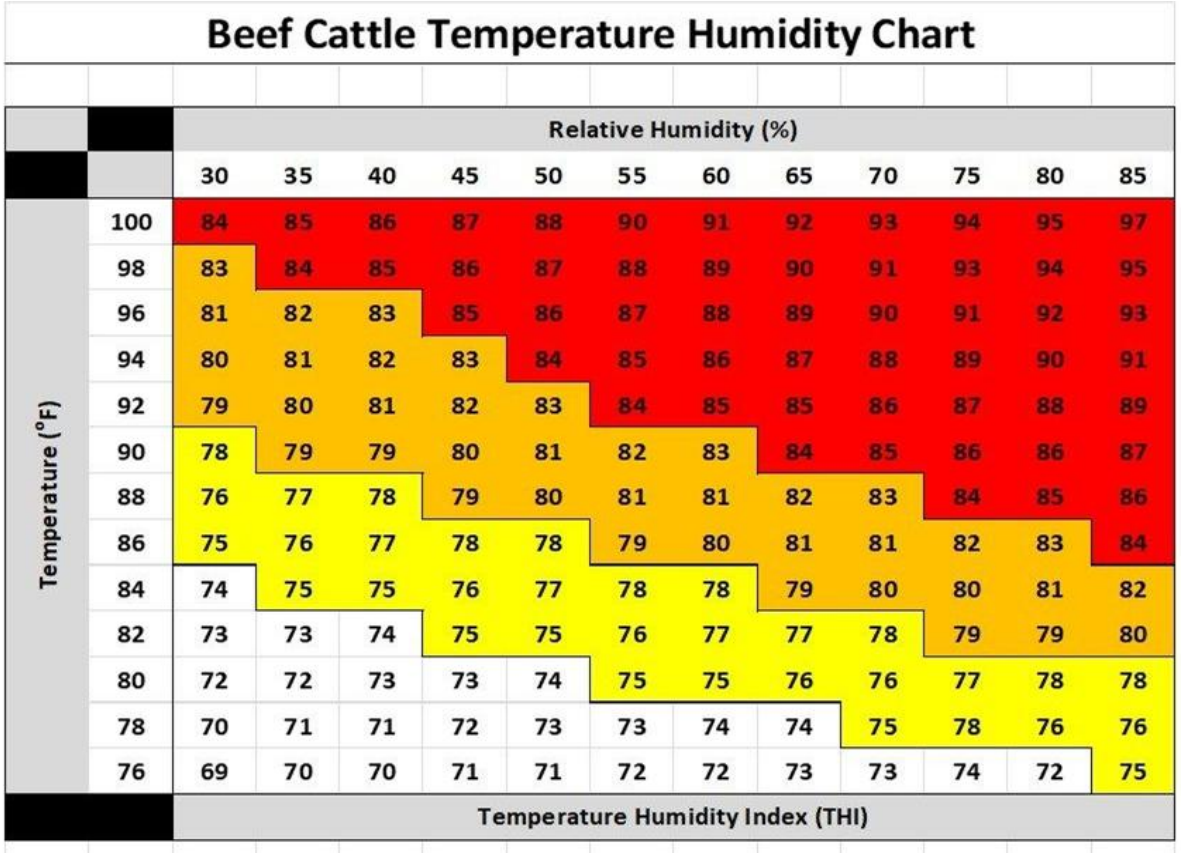
Supporting ∧ Silvopasture: What, Why, and How

Why Plant Trees Into Pasture?

- Summers are getting hotter
- Heat stress has serious economic consequences
- Trees are cheaper in the long term than investing in shade shelters that will simply break down over time and require ongoing labor to move



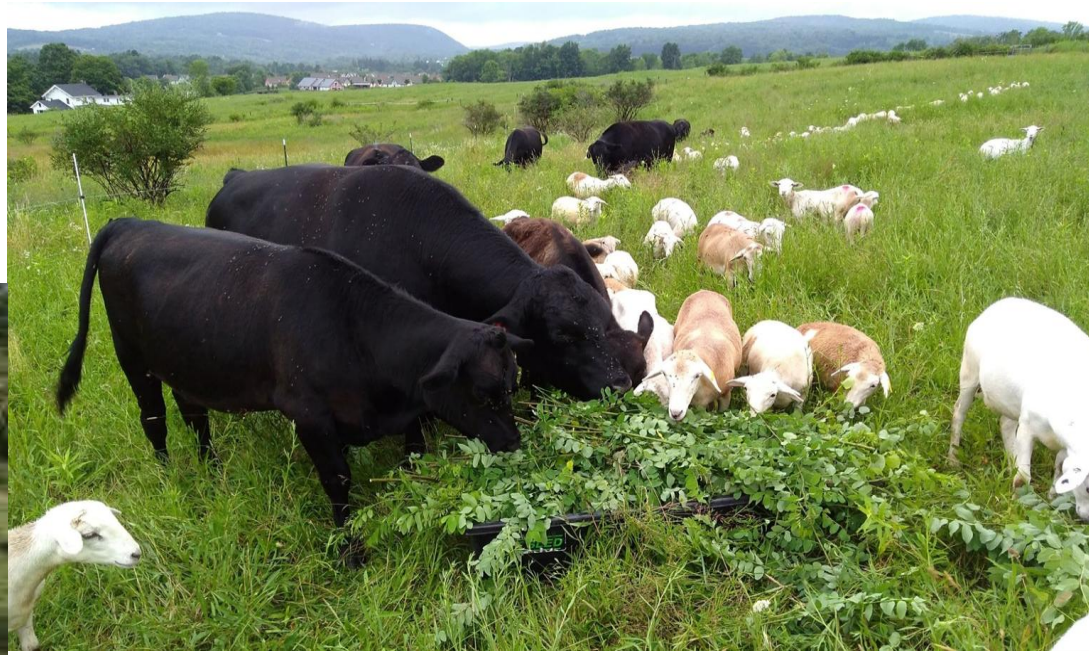
Beef Cattle Temperature Humidity Chart

Temperature (°F) \ Relative Humidity (%)	30	35	40	45	50	55	60	65	70	75	80	85
100	84	85	86	87	88	90	91	92	93	94	95	97
98	83	84	85	86	87	88	89	90	91	93	94	95
96	81	82	83	85	86	87	88	89	90	91	92	93
94	80	81	82	83	84	85	86	87	88	89	90	91
92	79	80	81	82	83	84	85	85	86	87	88	89
90	78	79	79	80	81	82	83	84	85	86	86	87
88	76	77	78	79	80	81	81	82	83	84	85	86
86	75	76	77	78	78	79	80	81	81	82	83	84
84	74	75	75	76	77	78	78	79	80	80	81	82
82	73	73	74	75	75	76	77	77	78	79	79	80
80	72	72	73	73	74	75	75	76	76	77	78	78
78	70	71	71	72	73	73	74	74	75	78	76	76
76	69	70	70	71	71	72	72	73	73	74	72	75

Temperature Humidity Index (THI)

Why Plant Trees? (cont'd)

1. Save $ (shade, feed),
2. Conservation (biodiversity, soil health)
3. New revenue streams (nuts, fruit, wood)



Baseline - Who should use this system?

- Rotational grazing, at a minimum, is a given
- Any species of livestock, but system should be designed accordingly
- Often best to begin with a marginal area of the farm and a small section rather than the whole farm

Planted Silvopasture Examples

from Shelterbelt Farm

First system (2015, 2 acres) - **Orchard** (“Crop-Livestock Integration”)

Goal = new farm enterprise

Species: apples, Asian pears, peaches, aronia and honeyberry shrubs

Second system (2022, <1ac) - **Fodder block**

Goal = feed for sheep to browse during dry summers

Species: willow, poplar, amorpha (river locust)

Third system (2022, <1ac) - **Nut and Berry Crops**

Goal = more new farm enterprises and/or feed for poultry/pigs

Species: hazelnut, elderberry, aronia

Fourth system (2024, 1 ac) - **Trees for Graziers demo**

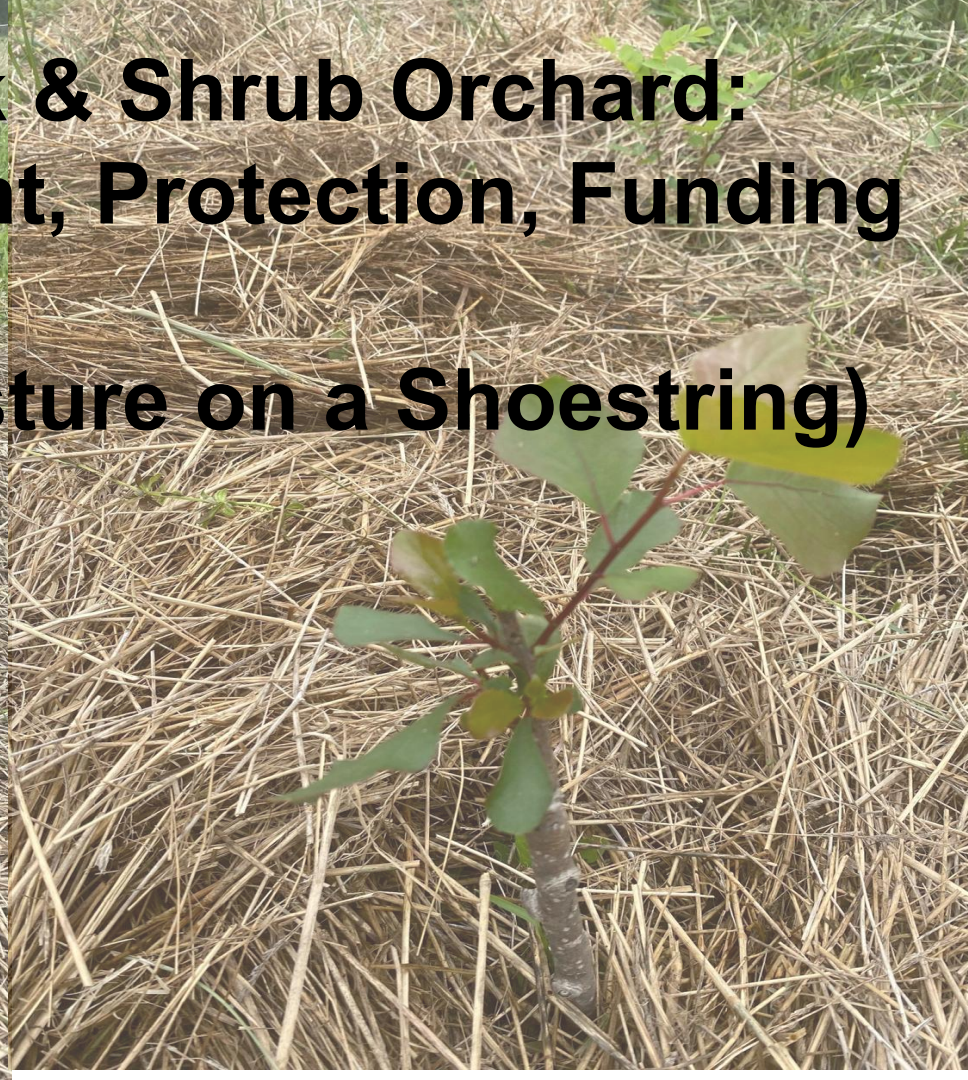
Goal = shade + feed for sheep/poultry + potential new enterprises

Species: willow, poplar, thornless honey locust, mulberry, persimmon

Orchard: Establishment, Protection, Funding

Fodder Block & Shrub Orchard: Establishment, Protection, Funding

(aka Silvopasture on a Shoestring)



Trees for Graziers Demo: Establishment, Protection, Funding

Silvopasture Fails

Didn’t account for flock/herd growth when designing spacing between rows

Sheep/cow escape, weedwhacker carelessness, and vole damage = girdled trees

If the first year after planting is a drought year and you have no way to water the trees, you will lose many

Lessons Learned / Overcoming Friction Points

Worthwhile to invest in quality planting stock, but it’s hard to find

Easy to be paralyzed by design decisions - keep it simple

When possible, plant in the Fall rather than Spring

Resources / Get Involved

- Clearinghouse of silvopasture resources coming soon: cornellsilvopasture.org
- New Cornell Small Farms online course will be offered Jan 2026 - **BF 235: Silvopasture** - Visit smallfarmcourses.com
- Join the Silvopasture Program Work Team (PWT) - meets monthly via Zoom

Contact

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