

Growing People and Pastures

at HAVEN Meadows Farm

HAVEN Meadows Farm, LLC

Near Cambridge/Harris, Minnesota
50 minutes north of St. Paul





Shannon Huberty, MOL

4-H:

- 22 Year 4-H Volunteer in Chisago County
- 11th year leading the Horseless Horse program

Personally:

- 30+ years Equestrian
- Regenerative focused Farmer

Professionally:

- Masters in Organizational Leadership and Data Analytics
- Work as a Business Analyst

- Strategic
- Analytical
- Learner
- Achiever
- Maximizer



Disclaimer

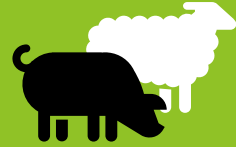
I am sharing my views and experiences. I would encourage you to research, and explore and make your own informed decisions.

Harmony at
sunrise

Kill pen rescue



Regenerative Agriculture Practices



Rotational Grazing



Cover Crops

▶ Opportunities at HAVEN



Youth Mentorship/Beginner Program



Haven Horses



Haven Hens

Building
Character,
Compassion, &
Community through
Christ's love.

Value Statements

Reducing The Financial Barrier
To Equine And
Eco-agricultural Education.



Horseless Horse Show 2023



22 year 4-H volunteer

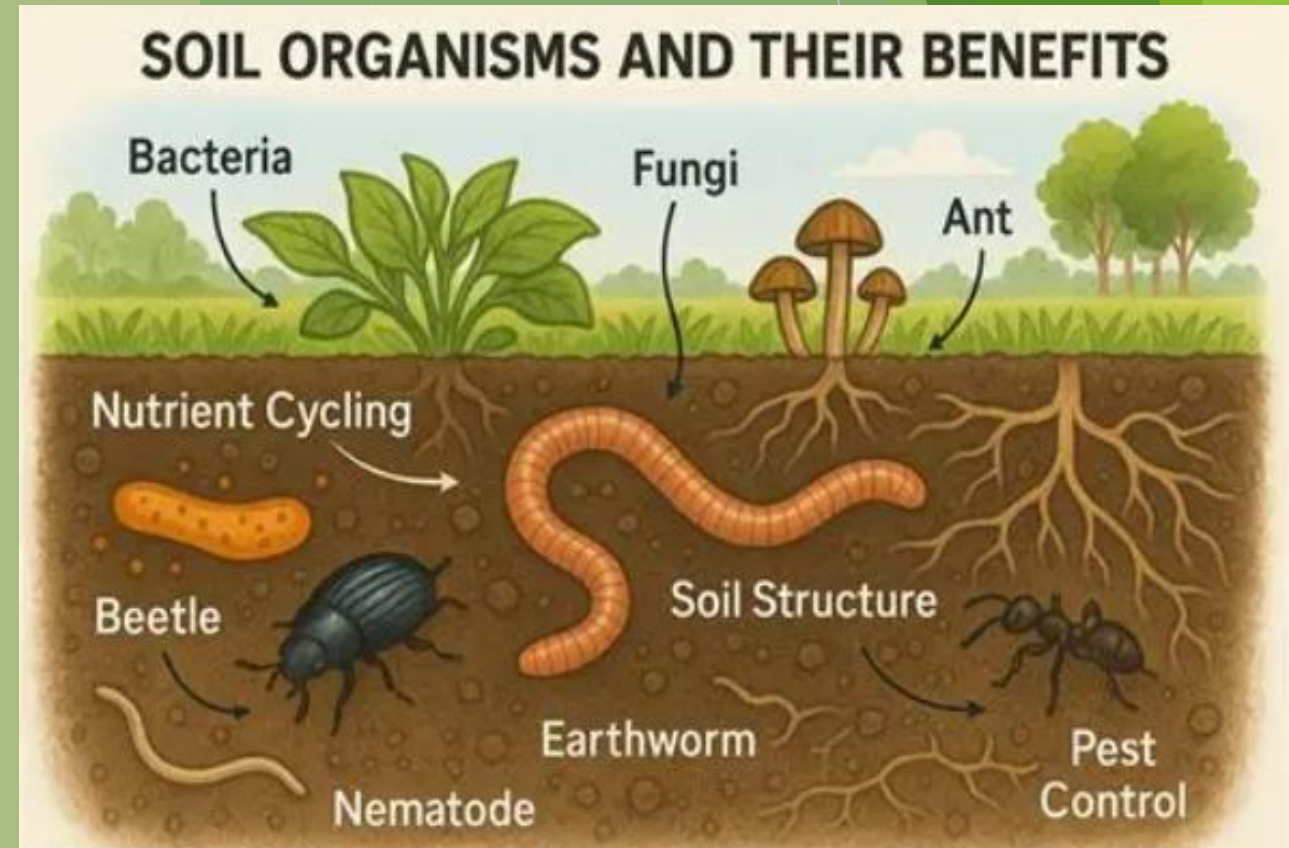
Over 135 youth served in our horse program in ten years.

► *Regenerative Agriculture:*

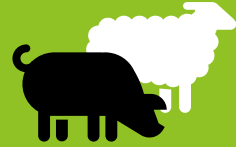
► *Regenerative Agriculture:*

► A way of farming that helps heal and improve our food and farming systems. It focuses on making the top layer of soil healthy again, increasing the variety of plants and animals (called biodiversity), and improving how water moves through the land.

► Regenerative farming Facts for Kids



Regenerative Agriculture Practices



Rotational Grazing



Cover Crops

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Youth Mentorship/Beginner Program



Haven Horses



Haven Hens

Horse Housing/ Management Needs



Horse Housing/ Management Needs



[What Shelter Do Horses Need at Lisa Sotelo blog](#)

Traditional Horse Pastures



Partially bare pasture, overgrazed



Short, all the same grass/nutrition



1

Dry Lots and Pasture Management challenges



2



3



4



5

<https://www.cowgirlmagazine.com/benefits-dry-lot-turnout/>

► *Rotational Grazing:*

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- Rotational grazing is a livestock
- management system where animals are
- periodically moved between pasture
- sections, allowing grazed areas to rest
- and regenerate.

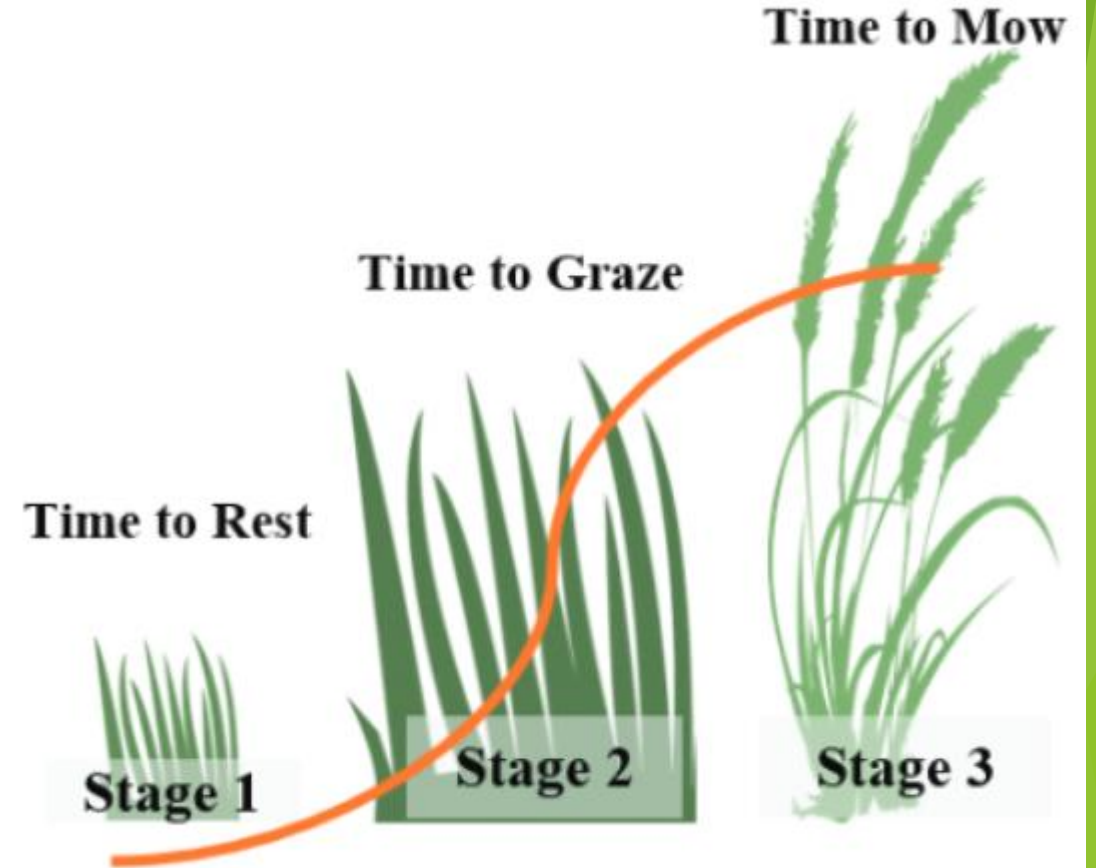


Figure 1. An illustration of the forage growth curve.



Paddock #1



Paddock #4



SHELTER



WATER

Sacrifice
Lot



HAY
FEEDER



Paddock #2



Paddock #3



Horse Pasture Layouts to Consider

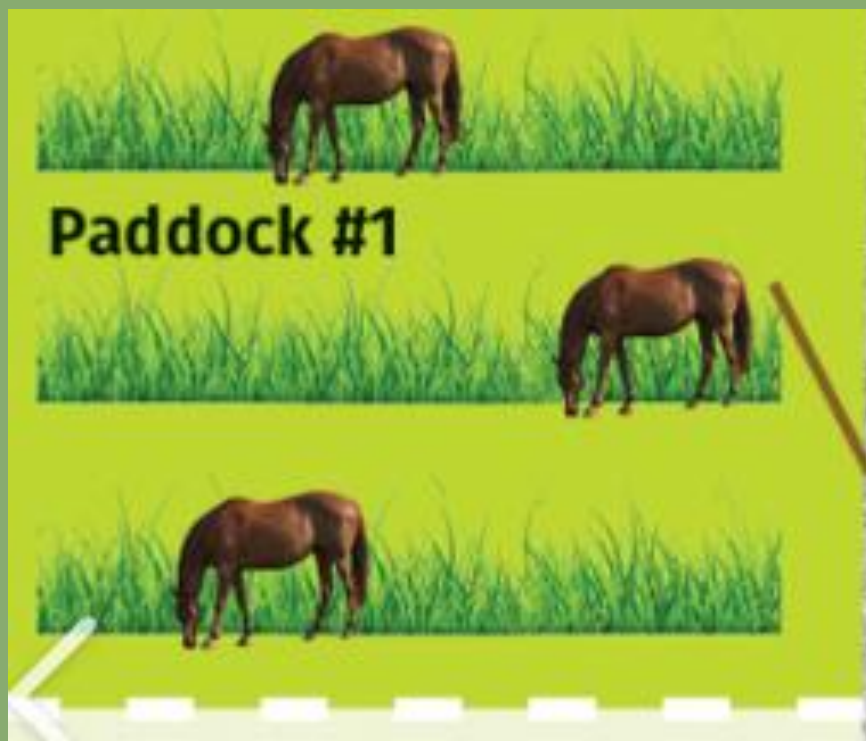


Horse Ranch Wallpapers – Top Free Horse Ranch
Backgrounds - WallpaperAccess

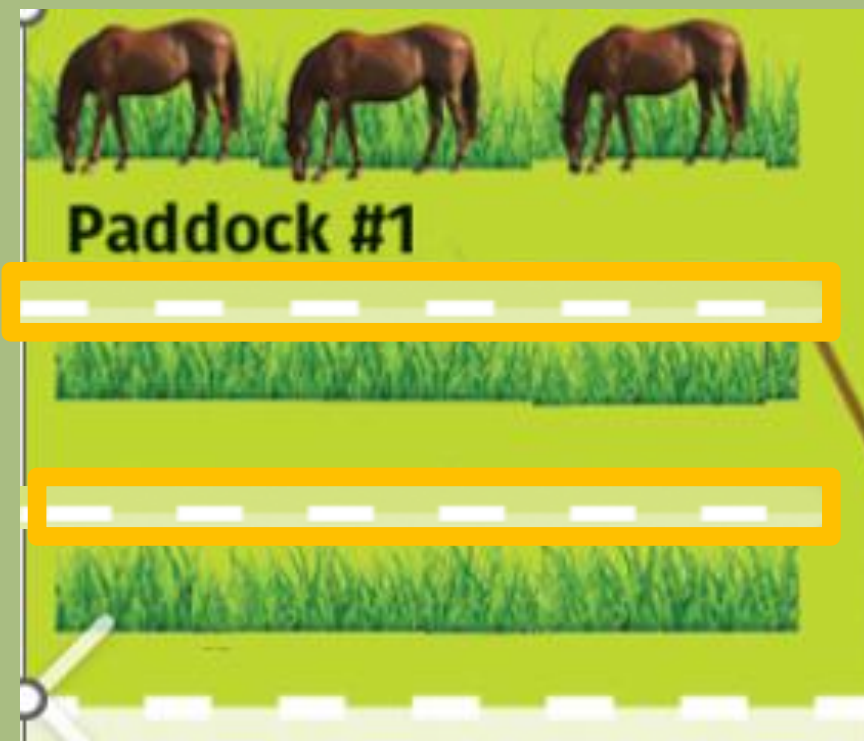
<https://s-media-cache-ak0.pinimg.com/736x/60/e6/c7/60e6c7d660b5f2515d999aad550e36bb.jpg>



- ▶ *Mob-stock Grazing/*
- ▶ *Intensive Rotational Grazing:*



Rotational Grazing



- ▶ *Mob-stocking Grazing/ Intensive Rotational Grazing:*
- ▶ A grazing management technique where livestock
- ▶ are moved frequently to small areas of pasture,
- ▶ or paddocks, at very high stocking densities.



Paddock #1



Paddock #4



SHELTER



WATER

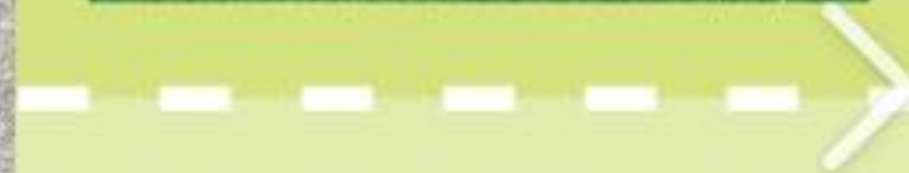
Sacrifice
Lot



HAY
FEEDER

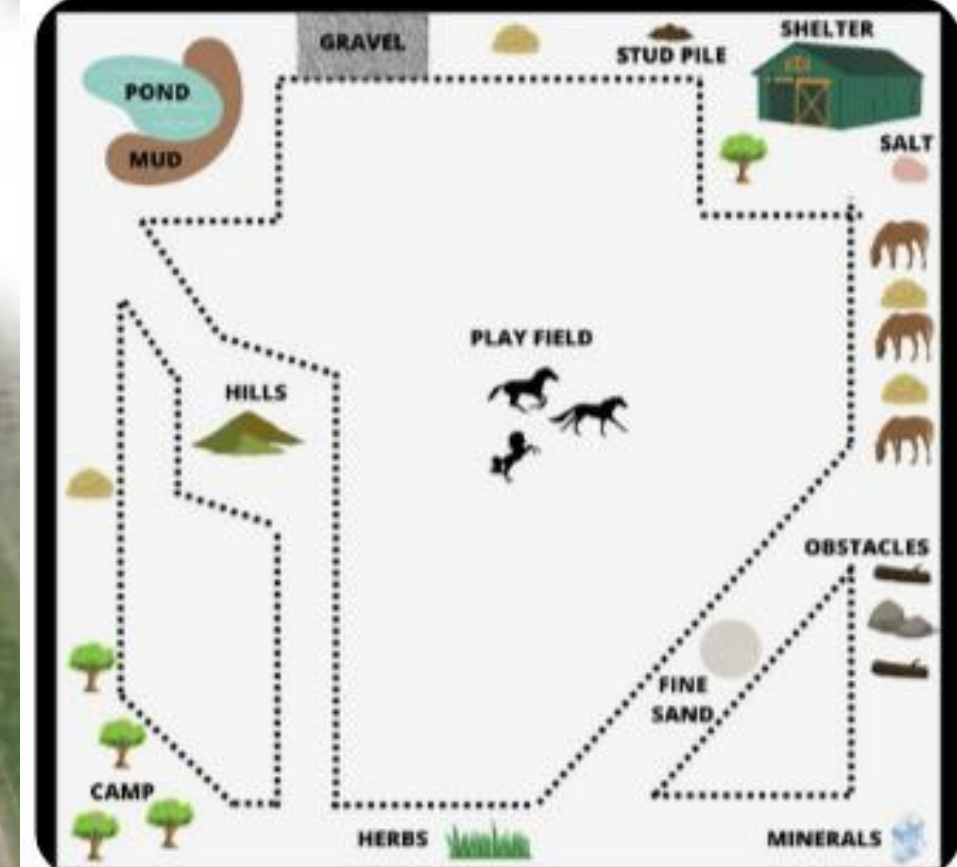


Paddock #2



Paddock #3





Paddock Paradise Track System

INFRASTRUCTURE

-  Hydrant
-  6 Pastures with perennial grasses and annual cool and warm season cover crops-45 day rotation
-  Barn
-  Silvopasture tree belts
-  Coppice Tree Fodder
-  Food Forest/
-  Orchard/Garden
-  Future High Tunnel Greenhouse
-  Livestock lanes
-  Future Barn lean to additions for animal capacity
-  Future Barn addition for animal capacity
-  Outdoor Arena
-  Round Pen
-  Access Control Fence, New

► *Multi-Species Grazing:*

- ▶ *Multi-Species Grazing:*
- ▶ Multispecies grazing involves grazing
- ▶ two or more species of livestock
- ▶ together on the same pasture,
- ▶ promoting biodiversity, improving
- ▶ pasture health, and increasing
- ▶ overall productivity.



Fencing



Animal Impact



<https://nwhorsesource.com/respect-power-horses-instincts/eat-grass-forage-free-choice>

<https://www.bing.com/cow-eating-fresh-grass-matthias-hauser.jpg>

<https://www.kimballstock.com/results.asp?db=a&fotid=KH>

<https://th.bing.com/th/id/OIP.kLUdHs4EXHXQF5etz3AbKwHaE8?w=294&h=196&c=7&r=0&o=7&dpr=1.3&pid=1.7&rm=3>

<https://www.istockphoto.com/photos/goat-eating-leaves>

<https://www.almanac.com/chicken-behaviors-dust-bathing-mating-preening-and-more>



Regeneration



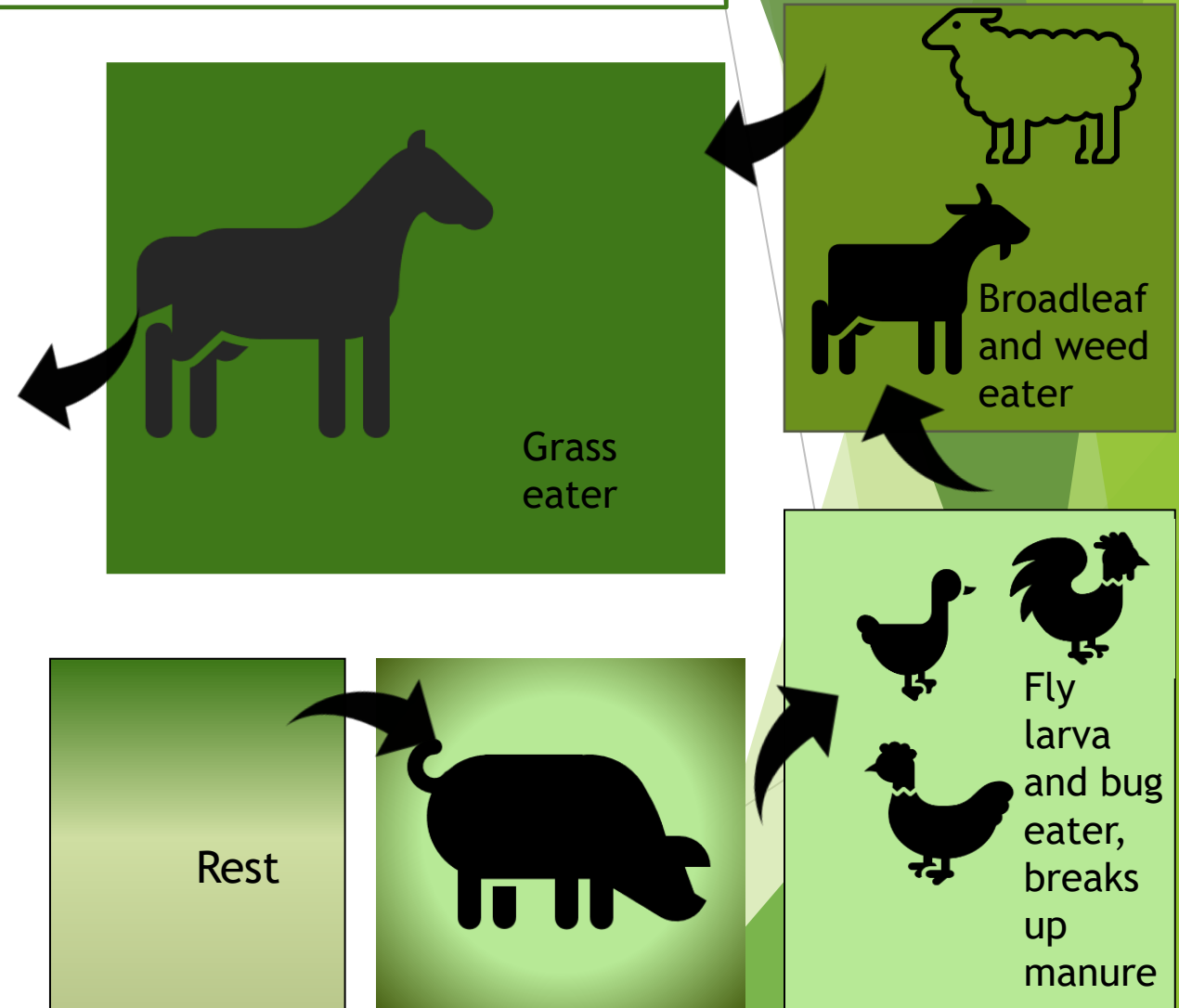
Cover crops for horse pastures | UMN Extension



Silvopasture forest 2025 project. Planting 500 trees for future shelterbelts for the horses in the pasture.

We start grazing a paddock with horses or the sheep and goats, depending on nutritional needs (lambling, senior horses, etc.) Then within 3 days we removed any horses or ruminates, we add the poultry and then the pigs then we let it rest for 30+ days. Horses and sheep/goats are dead-end parasite hosts, they can eat each others' parasites, end their cycle and not become infected.

Rotational Grazing



Management Decisions



Mechanical
Intervention

Height to
Graze

3
Days/Time
on Pasture

Parasite
Management

Rest and
Recovery

A white horse with a black halter is grazing in a lush green field. The horse is the central focus, with its head down eating grass. In the background, another white horse is partially visible, also grazing. The field is vibrant green with some yellow wildflowers.

Timing

Spring
(Fresh Grass
and Fall
(Frost) most
dangerous

Grazing
Muzzles
decrease
intake by
50%

Sugar levels
are at their
lowest from 3
am to 10 am.
Graze
overnight



A Cocklebur



B Purslane



C Green foxtail



D Pigweed



E Viola



F Plantain



G Velvetleaf



H Bidens



I Black nightshade



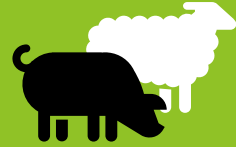
J Field thistle



K Horseweed

Weeds

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Youth Mentorship/Beginner Program



Haven Horses



Haven Hens

Growth of Grasses

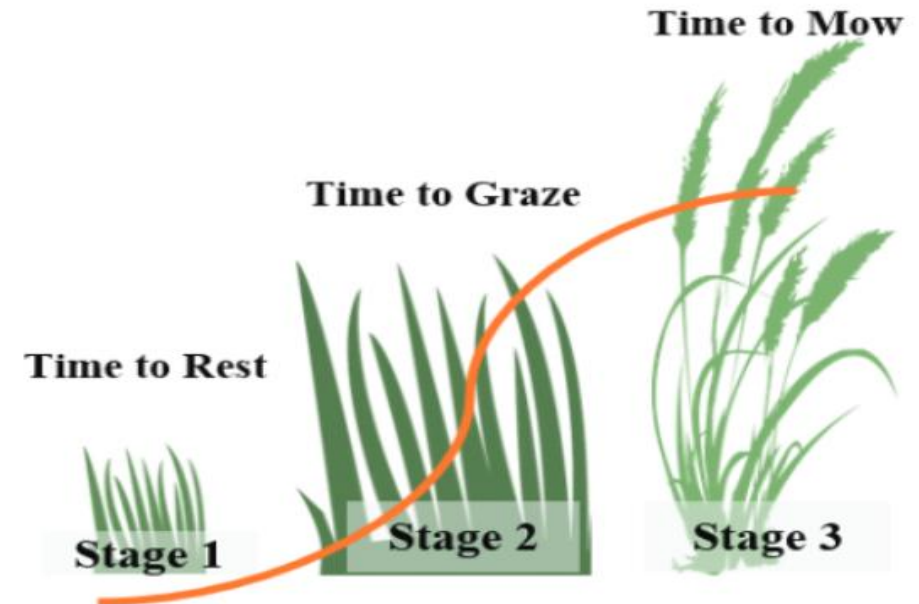
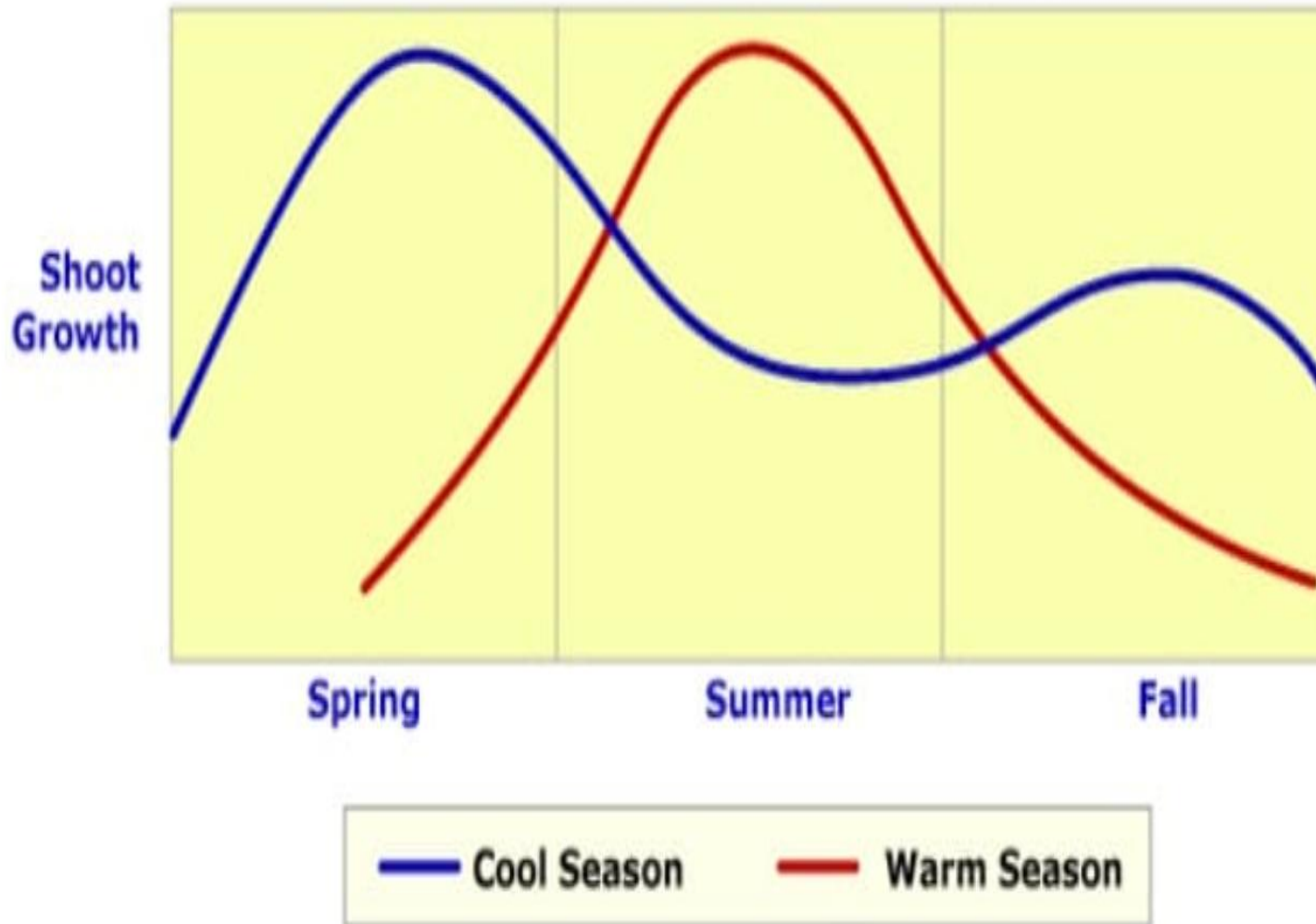


Figure 1. An illustration of the forage growth curve.

Cool-season versus warm-season grass productivity

	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
Smooth Brome							
Tall Fescue							
Big Bluestem							
Indiangrass							

Perennial Grasses

SPECIES	FULL SEEDING RATES in lbs./ac PLS (If Planting Alone)	NOTES	PLANTING DEPTH (inches)	CROP TYPE	SEEDING DATES	
					NORTH OF INTERSTATE 94	SOUTH OF INTERSTATE 94
GRASSES				50-70%		
PERENNIAL RYEGRASS	20-35 lbs/Acre	Strong seedlings/tolerant of frequent cutting/ don't like wet soils	CG	best-August 15-Sept 1 or May after frost is past		
ORCHARD GRASS	8-20 lbs/Acre		CG	best-August 15-Sept 1, Frost March/ April		
		Drought tolerant/doesn't like frequent cutting/often needs a full growing season before the plants are productive	CG			
SMOOTH BROMEGRASS	15 lbs/Acre		CG			
ENDOPHYTE-FREE TALL FESCUE	15-20 lbs/Acre	drought tolerant/frequent cutting	CG			
		very winter hearty/frequent cutting , high traffic areas, doesn't tolerate drought				
KENTUCKY BLUEGRASS	10-14 lbs/Acre		CG			
		moist soils/drought tolerant/frequent cutting, often need a full growing season before the plants are productive				
REED CANARY GRASS	8 lbs/Acre		CG	best April 15- May 31		
TIMOTHY	10-15 lbs/Acre	very winter hearty	CG	best-August 15-Sept 15		
U Will tolerate grazing its first year if grown to 8-10 inches with animals removed at 4 inches for rest.						
BIG BLUESTEM	7-12 lbs/Acre	Drought tolerant/Low NSC-less chance of laminitis/Warm season	WG	FROST best April 15- May 15		
INDIAN GRASS	10-12 lbs/Acre	Tasty /Warm season	WG	FROST best April 15- May 15		



Top 7 Reasons Farmers Use a Cover Crop Mixture

1. Reduces erosion
2. Increases soil organic matter
3. Increases yields for the following cash crop
4. Controls weeds
5. Reduces compaction
6. Scavenges nitrogen
7. Provides nitrogen for the upcoming cash crop

TYPES OF COVER CROPS



GRASSES

LEGUMES

BRASSICAS

**NON-LEGUME
BROADLEAVES**



GRASSES

► Endophyte free fescue

A naturally occurring endophyte fungus can cause "fescue toxicosis" leading to poor weight gain and reproduction in animals consuming the forage.

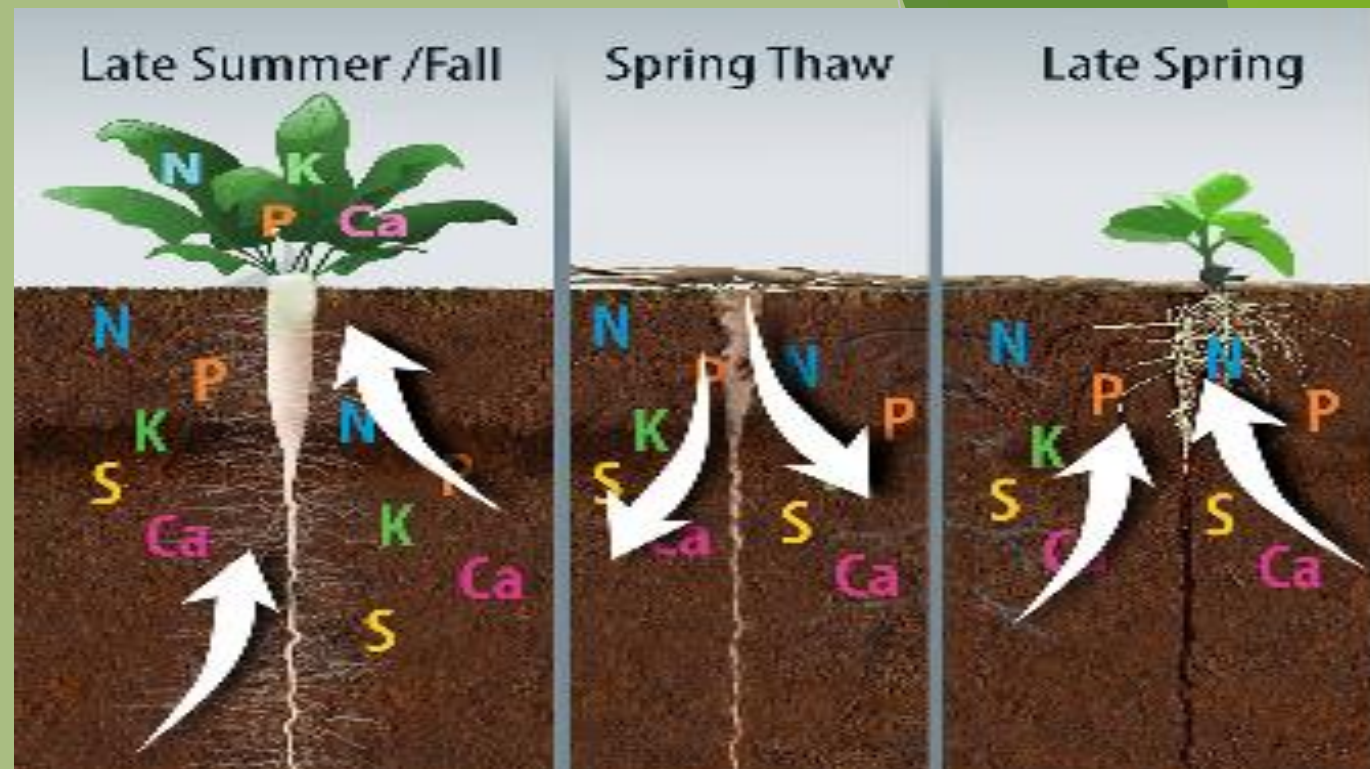
Horse Safe Common Cover Crops Recommended for Planting in Minnesota

					SEEDING DATES	
SPECIES	FULL SEEDING RATES in lbs./ac PLS (If Planting Alone)	NOTES	PLANTING DEPTH (inches)	CROP TYPE	NORTH OF INTERSTATE 94	SOUTH OF INTERSTATE 94
ANNUAL GRASSES				50-70%		
SPRING BARLEY*	50 lbs/acre PLS	Pick one or two per planting	0.75-1.5	CG	April 15-September 15	April 1-October 1
WINTER BARLEY	50 lbs/acre PLS		0.75-1.5	CG	Frost July 15-October 15	July 15-November 1
OATS*	30 lbs/acre PLS		0.5-1	CG	April 15-September 15	April 1-October 1
ANNUAL RYEGRASS	15 lbs/acre PLS	Graze before seed heads form	0-0.5	CG	April 15-September 15	April 1-October 1
WINTER CEREAL RYE†	50/55 lbs/acre PLS		0.75-1.5	CG	Frost July 15-October 15	July 15-November 1
WINTER TRITICALE	50 lbs/acre PLS		0.75-1.5	CG	Frost July 15-October 15	July 15-November 1
SPRING WHEAT*	50 lbs/acre PLS		0.75-1.5	CG	April 15-September 15	April 1-October 1
WINTER WHEAT	50 lbs/acre PLS		0.75-1.5	CG	Frost July 15-October 15	July 15-November 1
TEFF 4-6 lbs/acre good grazing during the summer slump- lowers blood insulin levels/good fall grazing. WG (May 15- June 30)						
JAPANESE MILLET ³	20 lbs/acre PLS	Pick one-summer	0.5-0.75	WG	June 1-August 1	May 15-September 1
PEARL MILLET ³	20 lbs/acre PLS		0.5-1	WG	June 1-August 1	May 15-September 1



Common Cover Crops Recommended for Planting in Minnesota

	FULL SEEDING RATES			CROP TYPE	SEEDING DATES	
SPECIES	¹ Minimum Seeding Rate in lbs./ac PLS (Incorporated Seed)	² Minimum Seeding Rate in lbs./ac PLS (Non- Incorporated Seed)	PLANTING DEPTH (inches)		NORTH OF INTERSTATE 94	SOUTH OF INTERSTATE 94
LEGUMES ⁵ 20-30%						
ALFALFA ³	12 lbs/acre PLS	Don't exceed 40% of your pasture in legumes	0.25-0.5	CB	April 15-September 1	April 1-September 15
FIELD/WINTER PEA ³	30 lbs/acre PLS		1-1.5	CB	Frost April 15-September 15	April 1-October 1
WHITE CLOVER	5 lbs/acre PLS		0.25-0.5	CB	Frost April 15-September 1	April 1-September 15
BERSEEM CLOVER	8 lbs/acre PLS		0.25-0.5	CB	Frost May 15-September 1	May 1-September 15



Common Cover Crops Recommended for Planting in Minnesota

	FULL SEEDING RATES			CROP TYPE	SEEDING DATES	
SPECIES	¹ Minimum Seeding Rate in lbs./ac PLS (Incorporated Seed)	² Minimum Seeding Rate in lbs./ac PLS (Non- Incorporated Seed)	PLANTING DEPTH (inches)		NORTH OF INTERSTATE 94	SOUTH OF INTERSTATE 94
BRASSICAS						
BEETS (Non GMO)	3 lbs/acre PLS	Plant both 1-2x annually	0.25-0.5	CB	Frost April 15-September 15	April 1-October 1
RADISH	4 lbs/acre PLS		0.5-0.75	CB	Frost April 15-September 15	April 1-October 1

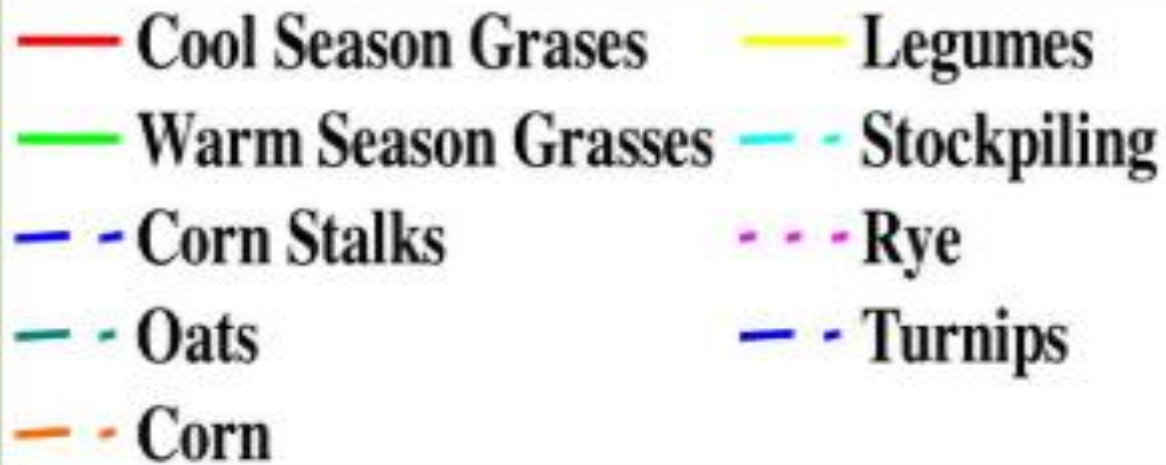
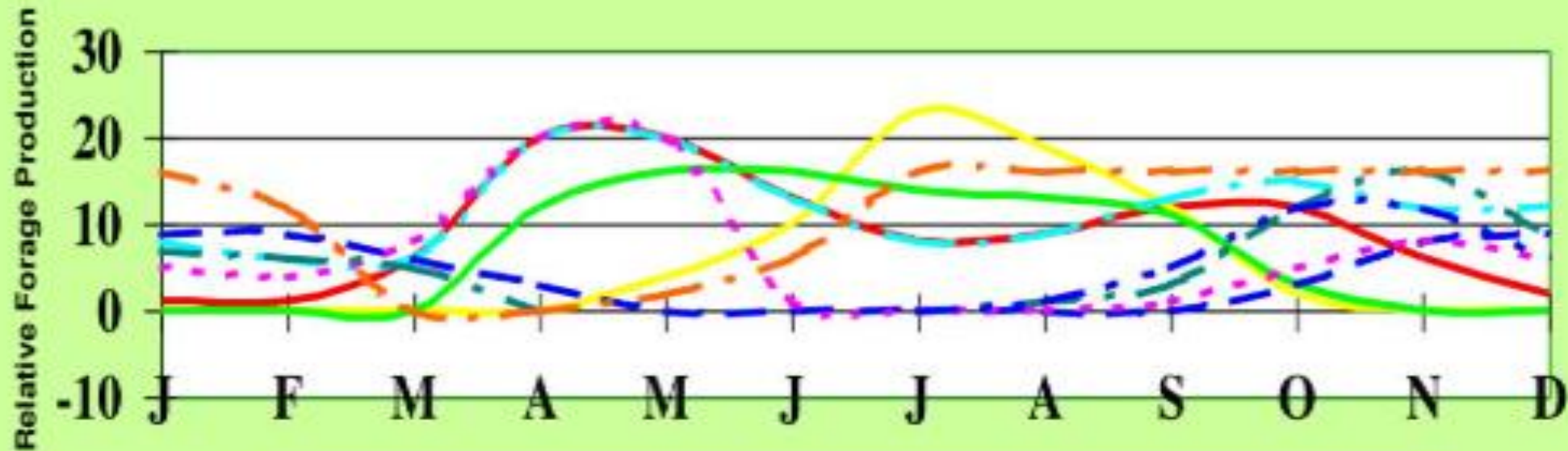


Common Cover Crops Recommended for Planting in Minnesota

	FULL SEEDING RATES			CROP TYPE	SEEDING DATES	
SPECIES	¹ Minimum Seeding Rate in lbs./ac PLS (Incorporated Seed)	² Minimum Seeding Rate in lbs./ac PLS (Non- Incorporated Seed)	PLANTING DEPTH (inches)		NORTH OF INTERSTATE 94	SOUTH OF INTERSTATE 94
NON-LEGUME BROADLEAVES ⁵						
CHICORY	2-3 <u>lbs/acre</u> plant once (annually?) parasite control			CB	<u>(April- May or 2-3 weeks before last frost)</u>	
BIRDSFOOT TREFOIL	2-3 <u>lbs/acre</u> plant once (annually?) high-quality forage, fixing nitrogen/parasite control			CB	Frost seed (April -May/July to Sept 1)	
SUNFLOWER	1 lb/acre PLS	Plant once-summer	1-3.5	WB	June 1-August 1	June 1-August 1

Reduces soil compaction, pollinators love it

Seasonality of Forage Options





Options for when I Plant

1. Frost seed when moisture and thawing is coming or in early spring
2. After my first round of grazing/late May
3. After my second round of grazing
4. Winter Rye in the early fall

How I Plant

1. Have two buckets for each field I am planting
2. Divide seed by size into a large seed bucket or a small seed bucket
3. Broadcast each bucket separately in 1-2 passes

Plants Poisonous or Harmful to Horses

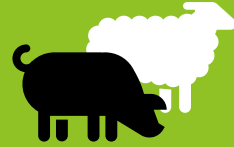


Avoid

Mustard- Digestive/Oral/Thyroid Upset/Foal death
 Kale- Colic
 Endophyte Infected Fescue- Reproduction issues
 Hairy/Crown Vetch-neurotoxin
 Red Clover- Slobbers
 Alsike Clover-Liver failure-Photosensitivity
 Buckwheat- Photosensitivity- sunburn
 Foxtail/German Millet-Joint Issues
 Sorghum, Sudangrass -Prussic acid/ Neurological/
 Fatal Urinary tract issues. Wait 14 days after a killing frost,
 before turning livestock. Do not graze below 18 inches after
 a light frost. Nitrate can also occur during drought
 conditions

[Minnesota NRCS Agronomy Technical Note 33](https://www.mnrcs.org/extension/technical-note/33)

Regenerative Agriculture Practices



Rotational Grazing



Cover Crops

▶ Opportunities at HAVEN



Youth Mentorship/Beginner Program



Haven Horses



Haven Hens

Horseless Horse Show 2023



25+ youth in Haven Horse Project

10 youth mentors

2 adult volunteers and countless parents

Over 135 youth served in our horse program in ten years.

▶ *“Each One,
Teach One”*

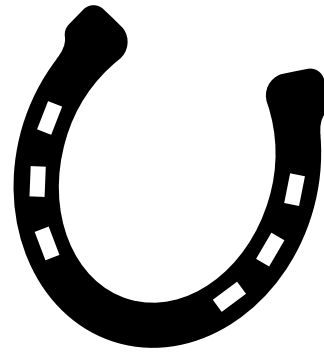
Mimi Silbert

Youth Mentors



YOUTH BENEFITS

- Relational Skill-Building
- Career & Resume Building
- Educational/Therapeutic
- Responsibility/Giving Back
- 8+ hours of lessons each month (April-September)
- Learning and Leadership Opportunities at the County, State and National level

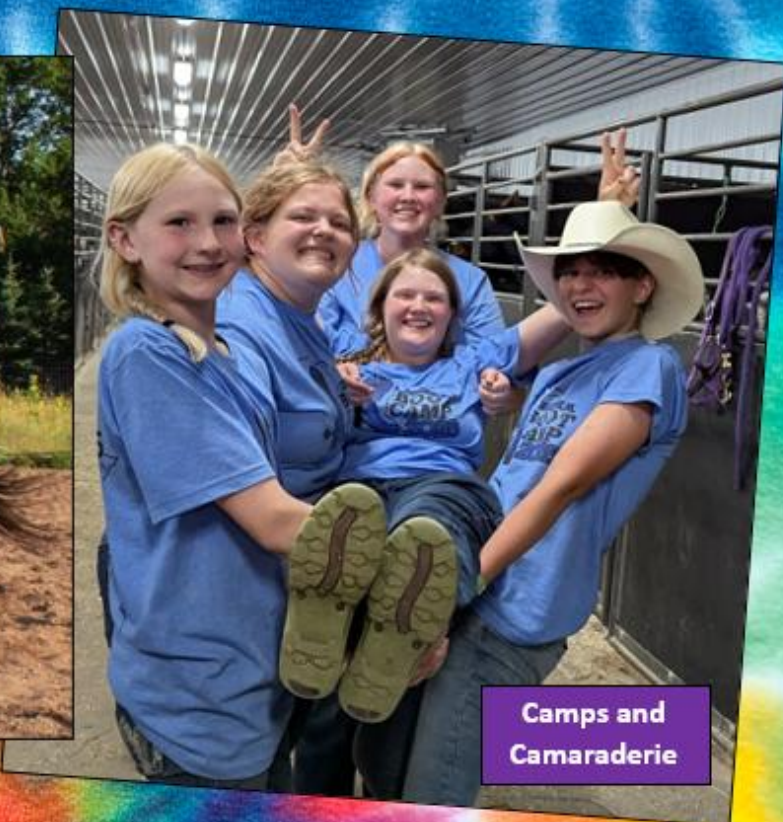




Drill Team



Parades



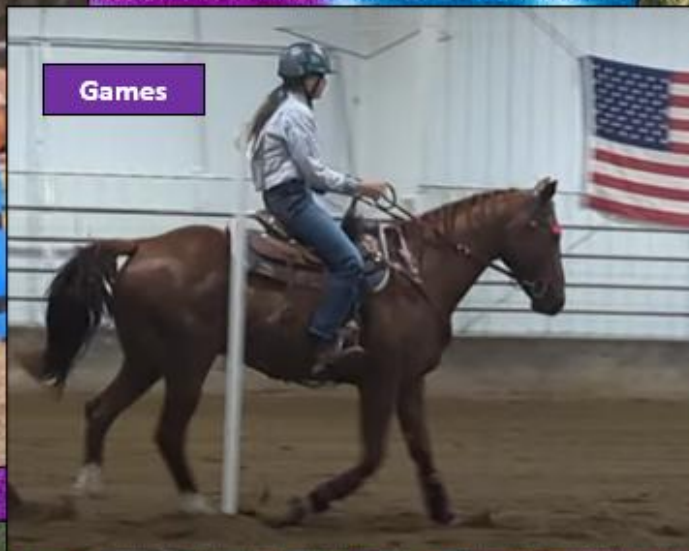
Camps and Camaraderie

Youth Opportunities at Haven Meadows Farm

Western Heritage



Games



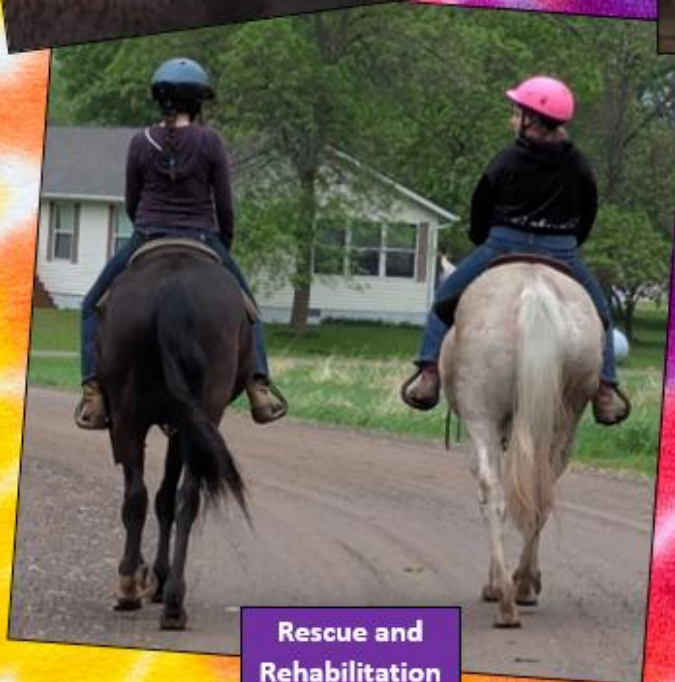
Lessons and
Trail Riding



Western, Ranch and English Riding



Rescue and
Rehabilitation



Youth Education, Teamwork,
Youth Mentorship and
Leadership





Drill Team



4-H Horse Training Project





Youth/Parent Trail Ride



12 Rescued
&
Redeemed

Haven Horses Beginner/Intermediate Program



How Much?!!!



\$2600+ in costs per year
per horse

\$500-550 for the annual vet/
dental visit

Farrier

Hay and Grain

Not Included:

Boarding or Labor

Horse Purchase Costs

Emergency Vet or Ongoing Care Costs

Truck/Trailer or Transportation Costs



How many youth in this picture would be able to participate if they had to pay the full program costs?





Being inclusive includes providing opportunities for those who would not be able to afford to participate.

Program Details



HAVEN HORSE- BEGINNER

Program Cost: \$125/ 4 sessions

HAVEN HORSE- INTERMEDIATE

Program Cost: \$125/ 4 sessions

HAVEN HORSE- JUNIOR MENTORS

Program Cost: \$250/ weekly sessions

April-June

YOUTH MENTORS-LEASE PROGRAM HORSES

Program Cost: Starts at \$500 sliding scale April-August
Year-round opportunity riding three+ times a week
plus lessons.

See www.HavenHorses.com



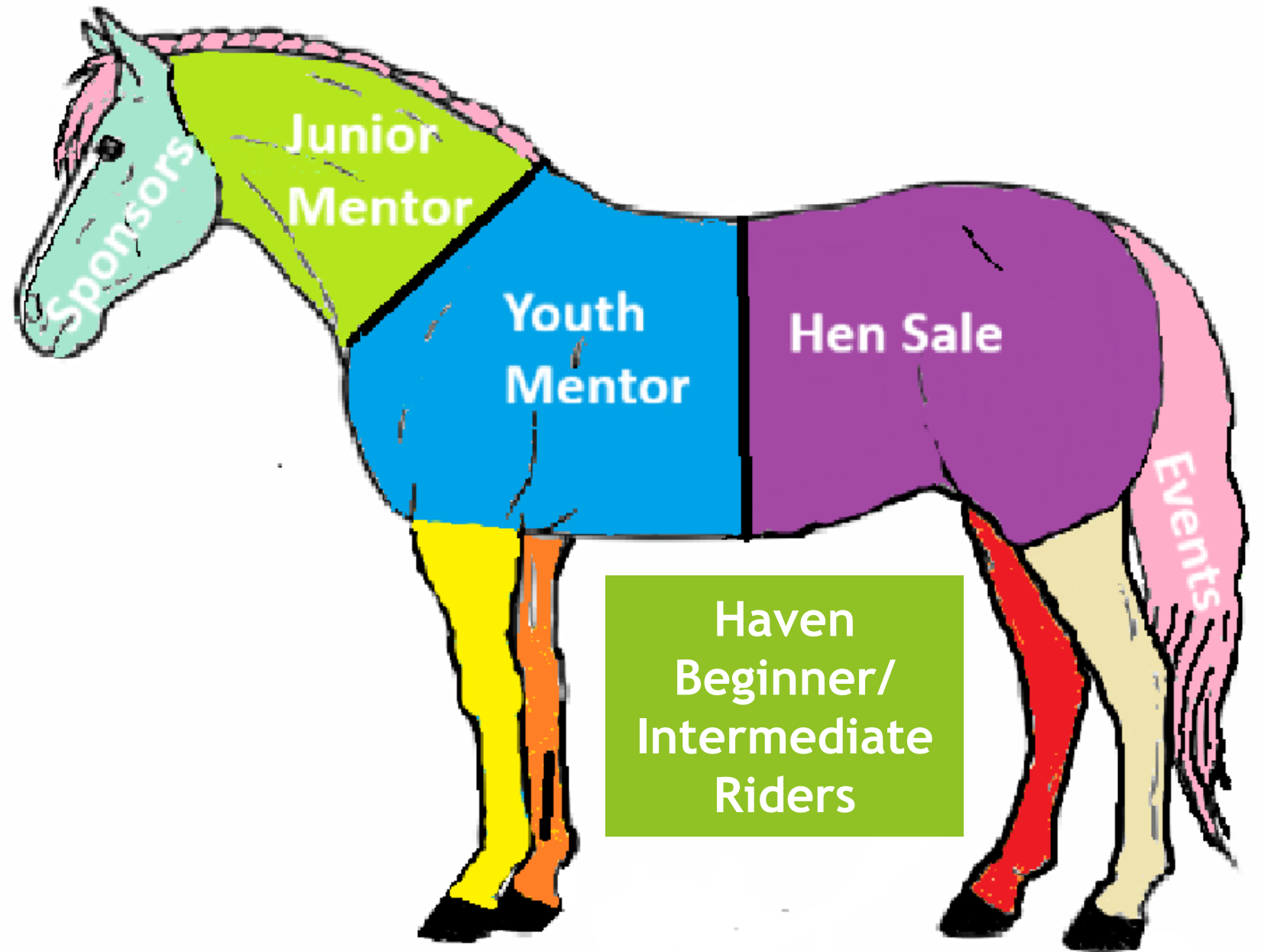
Helping
Youth
Soar!

We Appreciate Your Support!

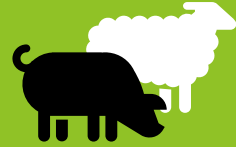
Join Us/
Volunteer

Buy A Hen

Sponsor/
Donate



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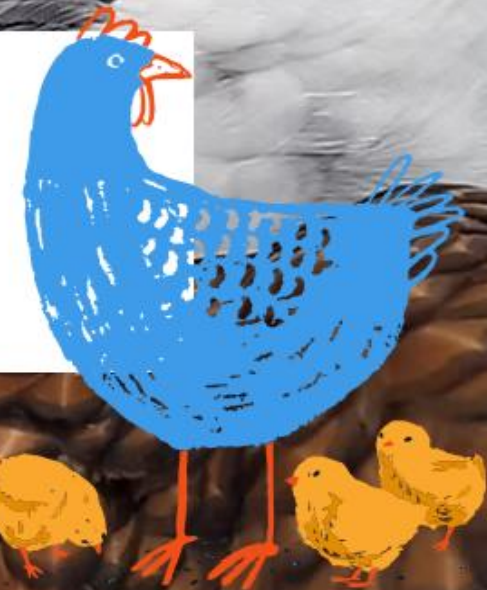


Haven Horses



Haven Hens

HAVEN HENS



Started Pullets for Backyard Flock Owners

Laying Hens for Sale



- We've raised 1500+ chicks to sell as started pullets
- Avoid baby chick catastrophes, unwanted roosters hours of labor in weekly in care
- 45+ Breeds Available
- Reservations are available on our website for picking up your ladies





First Flock

~7 Month Old
Laying Hens

- Fully feathered and grown.
- Most have started laying.
- On average \$15 more than third flock, but you'll receive eggs right away and didn't have to grow them or incur costs

Hatched between July 29th, 2025 and August 18th, 2025



Second Flock

~ 4+ Month Old Started Pullets

- Fully feathered.
- Should start to lay by late spring
- On average \$10 more than third flock, but you'll receive eggs soon at lower cost
- Good intermediary size if you want to combine hens from the other hatches



Third Flock

Available Starting April 4th

While considered fully feathered, at 2 months of age. Extra care should be taken when introducing them to previously established flocks and uninsulated environments.

This set hatched January 20th, 2026 and February 18th, 2026.



45+ Breeds Available



Hen Sale 9am-3pm

Saturday, April 4th

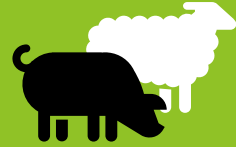
Saturday, April 18th

Saturday, May 9th

Hens on Display

No Reservations Needed

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Haven Horses



Haven Hens

Questions?

Shannon Huberty

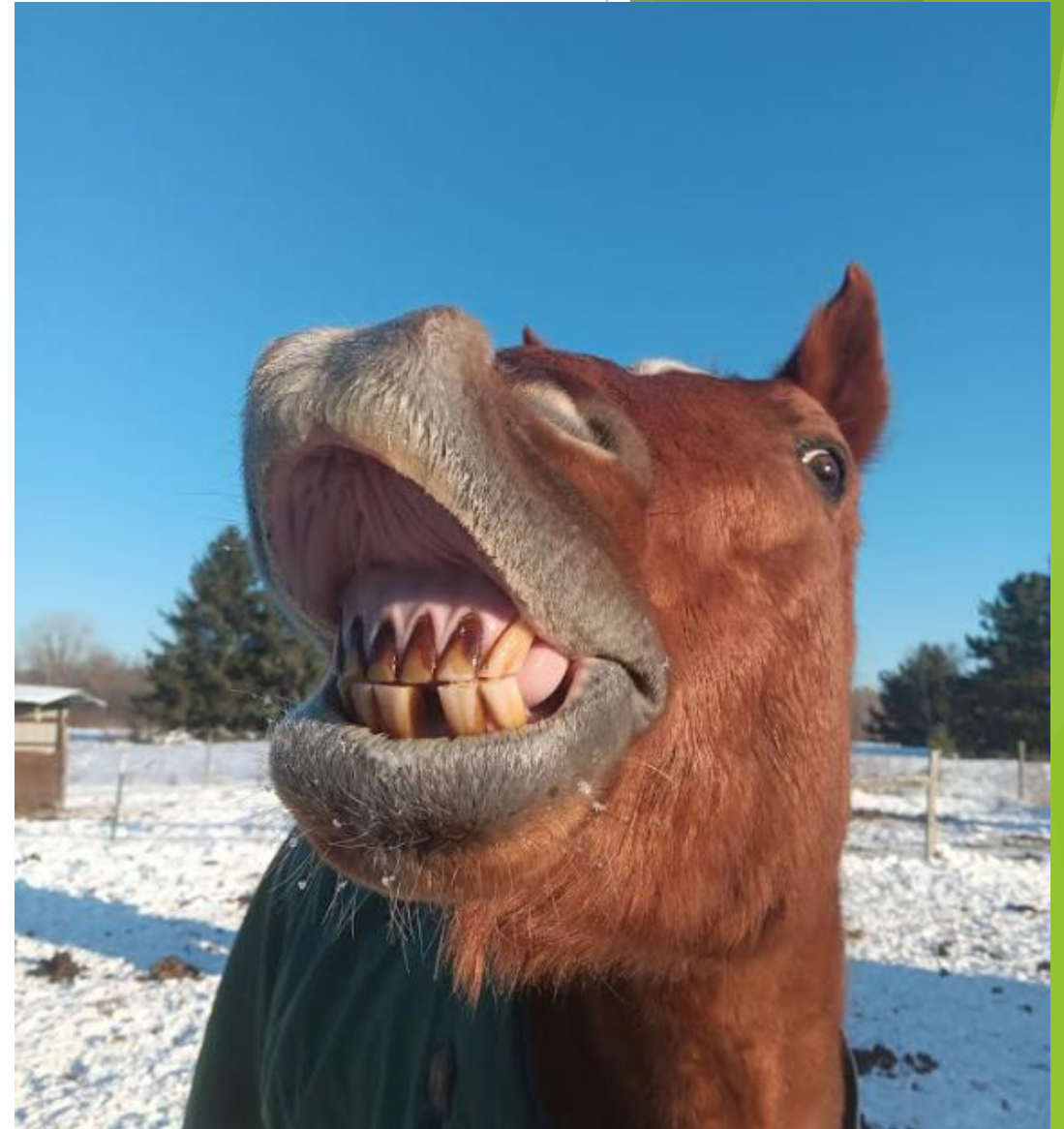
651-210-2344

Haven Meadows Farm

havenmeadowsfarm@gmail.com

www.HAVENHorses.com

www.HAVENHens.com





Thank you!

Shannon Huberty

Haven Meadows Farm

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www.HavenHorses.com

www.HavenHens.com