



Botanicals & Tips for Natural Livestock Management

Introductions



Food Animal Concerns Trust (FACT) is a national nonprofit organization that works to ensure that all food-producing animals are raised in a humane and healthy manner.



Larissa McKenna & Samantha Gasson

FACT's Humane Farming Program Team

Email Larissa: lmckenna@foodanimalconcerns.org

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Website: foodanimalconcernstrust.org/farmer

FACT's services to support livestock and poultry farmers include:

- **Conference scholarships** (ongoing)
- **Customized handouts** (ongoing)
- **Free webinars** (ongoing)
- **Fund-a-Farmer Grants** (not currently accepting applications)
- **Humane Farming Mentorship Program** (not currently accepting applications)
- **Financial and Business Training** (not currently accepting applications)

Our Presenter



Hubert Karreman, VMD

Botanicals & Tips for Natural Livestock Management



Hubert Karreman, VMD
F.A.C.T. April 6, 2022

Formula for healthy livestock:

Fresh air: choice to be inside or outside

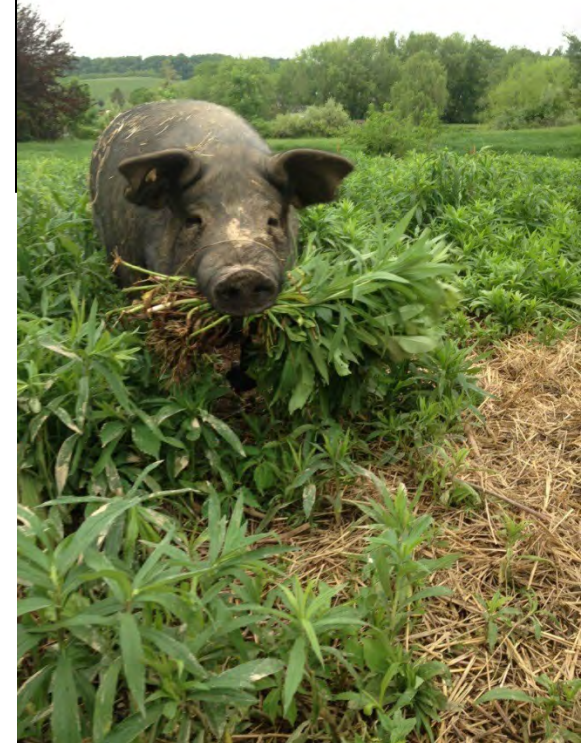
+ Lots of Dry bedding

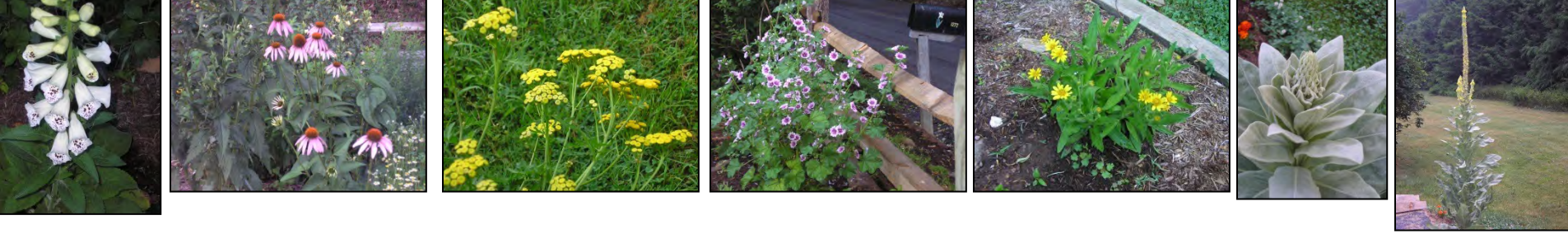
+ Direct contact with pasture & earth

+ Forages

+ Lots of high quality water

This is an excellent “vaccination” program





There will be dramatically less illness **IF...**

#1 Management closely mimics nature

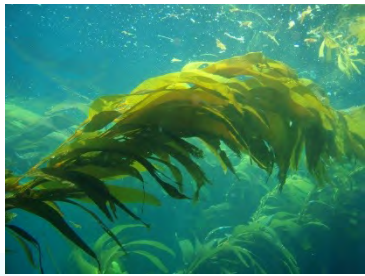
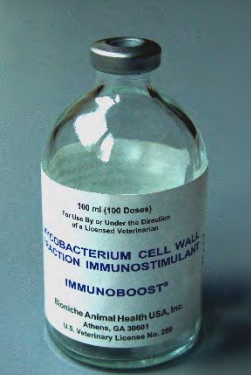
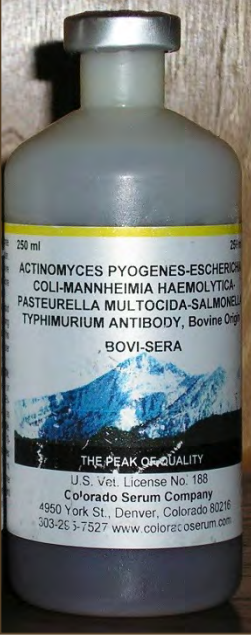
#2 Observe, adapt & guide

#3 Optimize animal density



Treatments that Support the Immune System

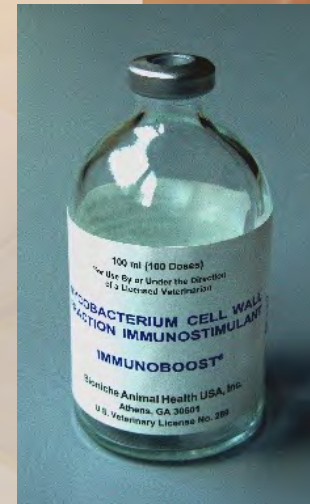
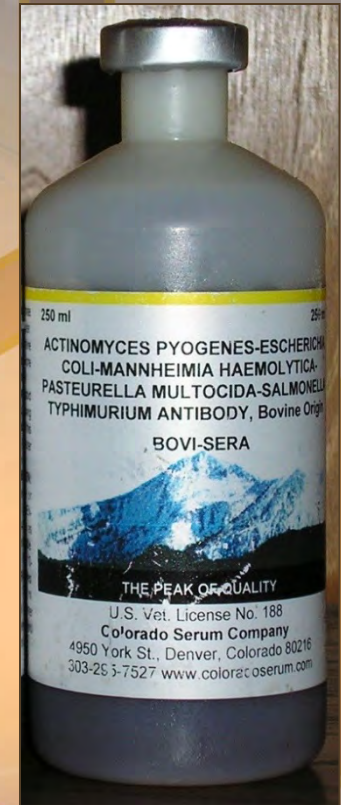
- Biologics
- Botanicals
- Homeopathy



BIOLOGICS

- Serum products: Multi-Serum®, Bovi-Sera®
excellent against hot coliform mastitis;
ok against pneumonia if really early
- Colostrum-whey products:
Biocel CBT®, **Impro®**
- Bacterial cell wall fractionates:
Immunoboost®
β-glucans (from mushrooms)

Hyper-immune eggs (use free range)



Botanicals

Food

Herbs

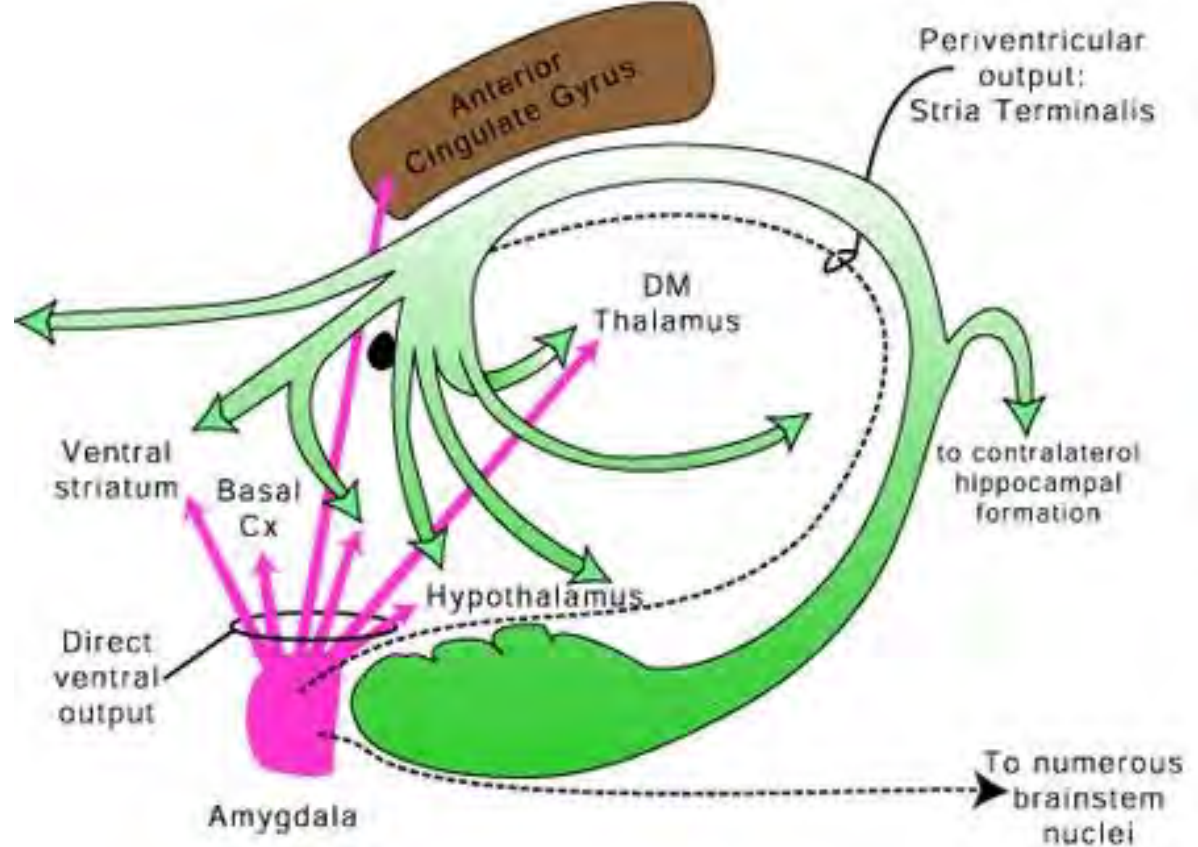
Drugs



Scent, Memory, Satisfaction

Essential Oils

have a profound effect
on the limbic system









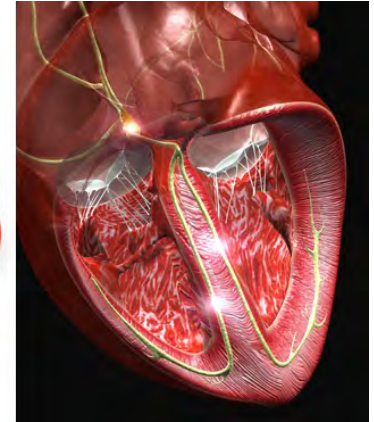


09/05/2014 06:18

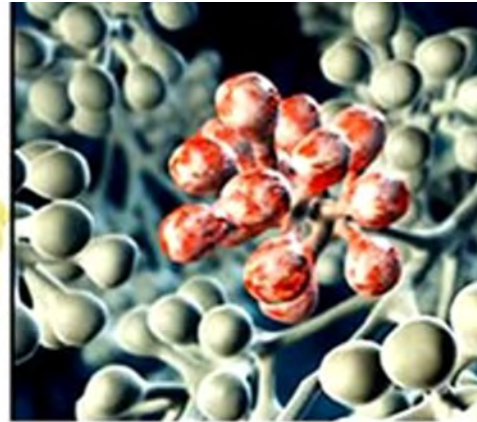
Doctrine of Signatures



carrots greatly enhance eye health



lycopene in tomatoes reduced risk for heart disease



Grapes increase the moisture content in the lungs and can also reduce asthma problems. and studies have found grapes fight against lung cancer.



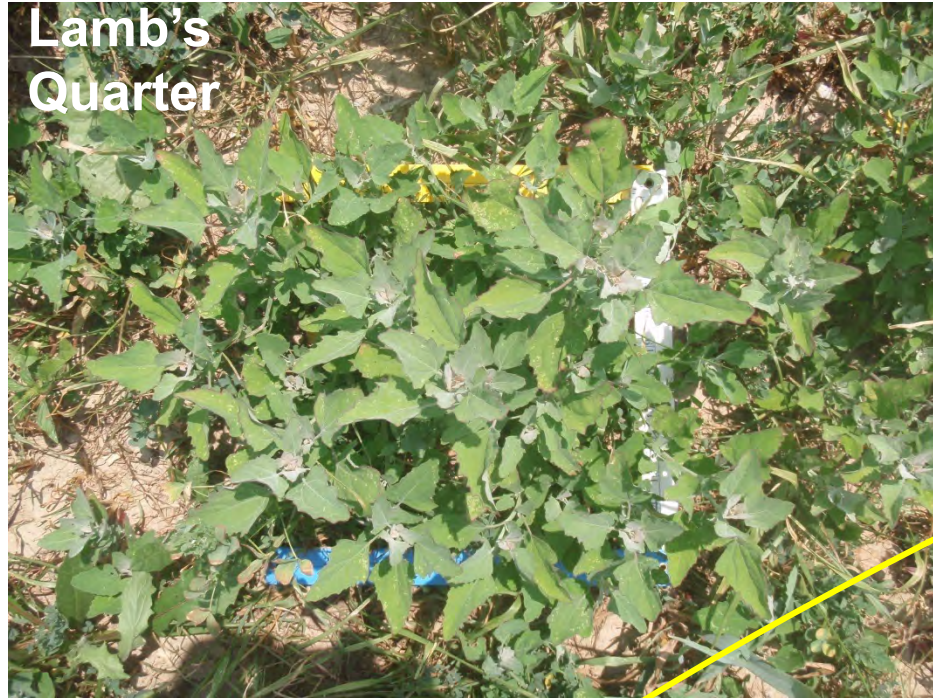
**“Grass” is greener
on the other side
of the fence**

Weeds as feeds

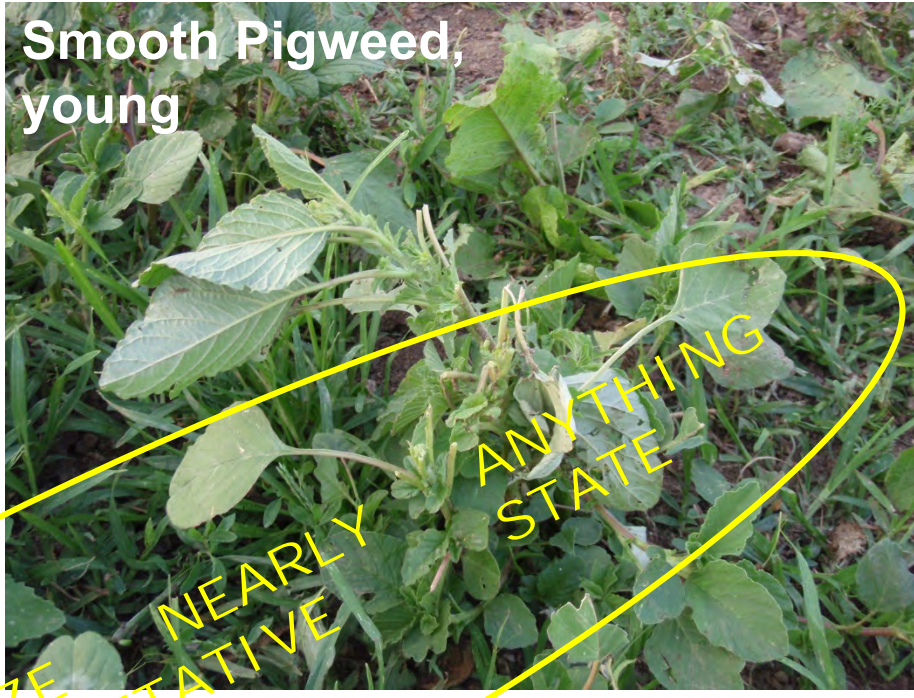
courtesy of Jerry Brunetti www.agri-dynamics.com

	Alfalfa	Dandelion	Chicory	Comfrey	Plantain	Nettle (leaf)	Burdock	Cleavers	Curly Dock	Yarrow (bloom)	Purslane
Protein	20.97%	25.00%	19.5%	23.7%	19.6%	25.7%	29.0%	11.7%	32.7%	15.2%	18.6%
N:S	11:1	10:1	8:1	14:1	6:1	4:1	5:1	7:1	15:1	14:1	12:1
ADF	32.1%	19.2%	32.8%	29.8%	34.1%	22.6%	25.1%	40.6%	19.5%	34.6%	26.4%
NDF	43.6%	30.0%	46.8%	42.2%	45.8%	34.4%	36.5%	49.1%	44.7%	43.0%	38.5%
Relative feed value	136.2%	229.0%	126%	145%	127%	193%	177%	108%	153%	134%	165%
TDN	63.89%	80.90%	63.5%	66.8%	64.4%	74.5%	71.8%	57.1%	77.8%	61.7%	72.9%
ME (mcal/lb)		1.33	1.04	1.10	1.06	1.22	1.18	0.94	1.28	1.01	1.2
NE/Lact.	0.65	0.85	0.65	0.69	0.66	0.77	0.75	0.58	0.81	0.63	0.76
Calcium	1.58%	1.04%	0.89%	2.73%	1.84%	4.38%	2.10%	1.3%	0.83%	0.99%	1.3%
Phosphorus	0.37%	0.33%	0.31%	0.20%	0.26%	0.41%	0.34%	0.39%	0.37%	0.43%	0.38%
Potassium	2.05%	4.46%	3.59%	3.94%	2.97%	3.01%	3.28%	2.46%	3.53%	3.25%	3.17%
Magnesium	0.46%	0.26%	0.26%	0.39%	0.17%	0.39%	0.43%	0.25%	0.64%	0.29%	0.8%
Sulfur	0.31%	0.41%	0.37%	0.27%	0.53%	0.94%	0.90%	0.26%	0.35%	0.17%	0.24%
Iron ppm	171	657	195	176	83	349	149	70	111	100	4419
Cu ppm	15	15	14	29	12	11	26	13	13	17	37
Zinc ppm	30	34	43	46	44	40	32	127	38	40	265
Mn ppm	23	35	36	192	30	36	47	66	36	71	163
Boron ppm	50	30	28	42	29	67	32	15	31	26	29

Lamb's Quarter



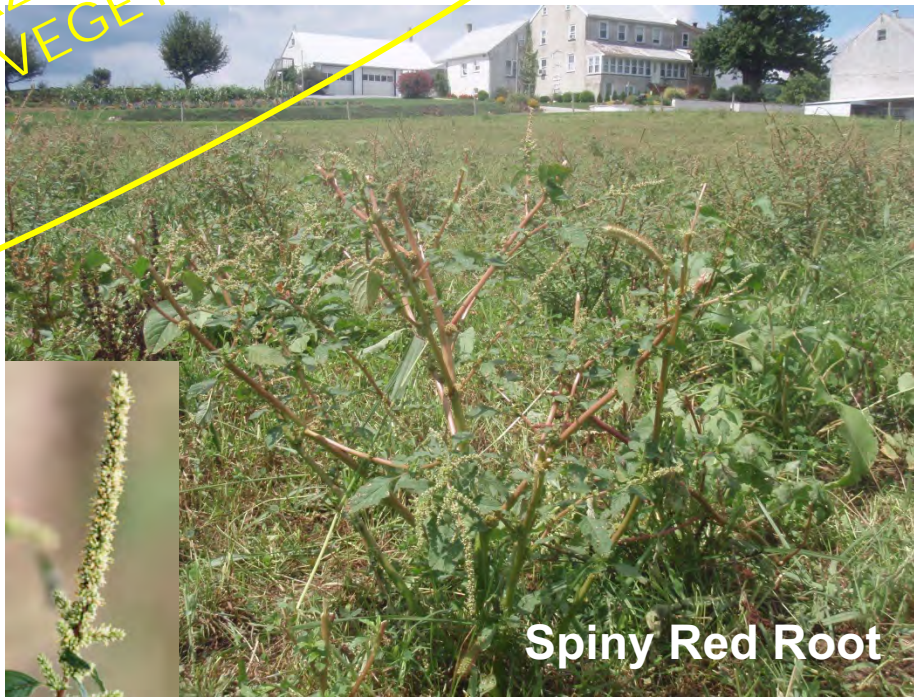
Smooth Pigweed, young



Foxtail

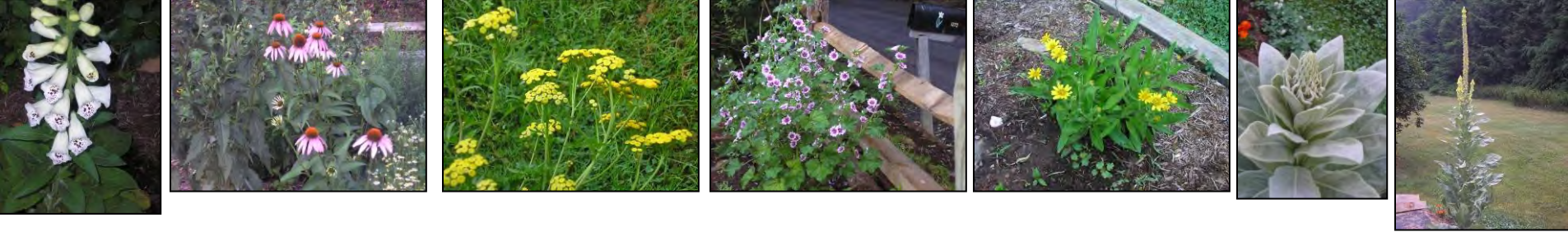


COWS IN WILL A



Spiny Red Root

GRAZE NEARLY VEGETATIVE ANYTHING STATE



With continuous grazing of dairy cows...

Day 1 – the paddock is their dining room

Day 2 – the paddock is their living room

Day 3 – the paddock is their bathroom

- Nova Scotia Extension Service



Grazing & Internal parasites



3-4 week rotations led to heavy parasite burden



Larvae
reside in
the first
two inches



Grazing taller
= grazing
above the
larvae zone

**ALWAYS
FOLLOW
MAMMALS
WITH
POULTRY**





23

A consequence of mob stocking and frequent moves is **taller grass**

And cleaner backsides.....



Multi-prong approach to internal parasites



Birds foot trefoil



Chicory



Dung beetles



Pastured poultry



Clipping pastures



Ferric chloride

Phytotherapeutic forages

(*in vivo*)



Birdsfoot trefoil ↓ FEC and Chicory ↓
adult worms compared to white clover
& ryegrass

(Marley, 2003)

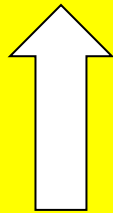
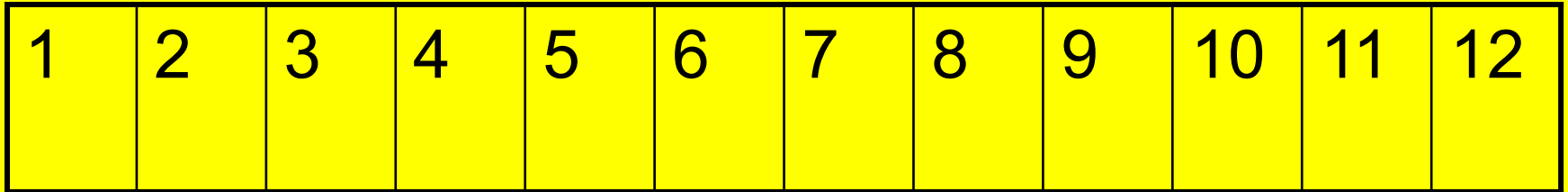


Sulla ↑ antibody titers and ↓ adult
Ostertagia circumscincta compared
alfalfa (Niezen, 2002)

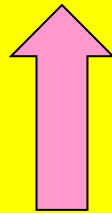


Sainfoin ↓ L3 and adult *H. contortus*, *T.*
colubriformis and *D. viviparous* (Paolini,
2004; Molan, et. al, 2000)

Weeks of rest after last grazing



Optimum
nutrition



Best
compromise



Optimum
Parasite
Control and
Plant recovery

Natural Wormers



VERMITOX



Chico State

Vermitox – Hematinic & strong constipator
Ingredients: Iron, Manganese, Zinc, Cobalt, Copper – as sulfates + herbs

GARLIC (allicin-based product) in Holstein calves had no effect of altering duration of crypto diarrhea but in high doses did delay its onset (JAVMA 1998)

Tip: CuSO₄ prior to treating with natural wormer

Battle against diarrhea just due to internal parasites (round worms) at weaning time





TREATMENT:

Oct 7 4oz chamomile & 4oz mallow (Althea) once daily for 4 days

Oct 9: Added Black walnut hulls 2 handfuls once daily & Wormwood 2 handfuls twice daily.

Oct 12: No diarrhea noticed. Ended TX mallow, black walnut hulls & wormwood.

Oct 20: Finished Chamomile



Do not freeze; add Sweetener

Bovinity Health, LLC
Hubert J Karreman, VMD
555 Red Hill Road, Narvon, PA 17555
717-766-7088

FERRO for Scours, anemia, stomach worms, coccidia

Ingredients: Ferrous sulphate, Ferric Sulphate, Manganese Sulphate, Zinc sulphate, Cobalt sulphate, Nickel sulphate, Copper sulphate

ADMINISTER: 10cc/tail or 15cc/halter orally once daily for a week. Can put in gel milk

EXPIRES: _____

Estimated: _____

Milk withheld _____ Hours _____ Date _____
Meal withheld _____ Days _____

Not for human consumption

H.J. Karreman, VMD
Keep out of reach of children

Grower-finishers about 1 month after diarrhea
& being fed 3 times a day



Parasites: FLIES need multi-prong approach



Parasites: Mange / lice



- Scrub with Betadine, allow to dry apply dry mix of elemental sulfur + tobacco dust; or calendula ointment
- Repeat in a week

Pig Ear Lice: Calendula ointment



Diarrhea in Adult ruminants



GRASS HAY



OATS



Calf diarrhea (rare if on real milk)

Feed fluids 4 times daily or even hourly (less volume but more frequently)

Slippery elm & Marshmallow

Oregano

Chamomile

Alternate milk + tea/electrolytes



Chamomile



Mallow



Slippery elm

Tonic for Horses and Cattle

Rx:

Gentian

Nux vomica

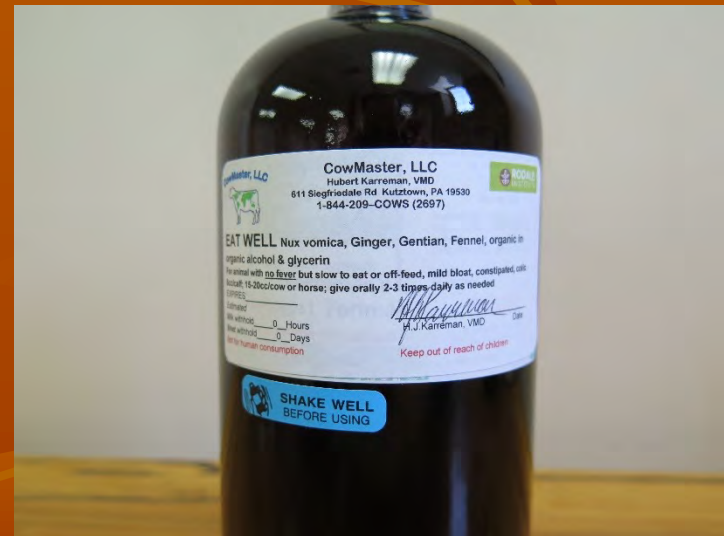
Ginger

Sodium bicarbonate

EatWell for:

Bloat, Constipation, Colic

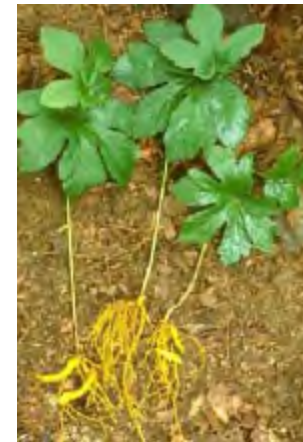
Give 5-15cc 2-3 times daily



GetWell for infections



- **Garlic, Ginseng, Goldenseal, Echinacea, Barberry** *in certified organic alcohol*
- **Calf scours & sick cow:**
or 5 - 15cc orally twice daily for 3-4 days.
- **Intravenous: 90cc in 500cc dextrose for pneumonia & systemic illness.**

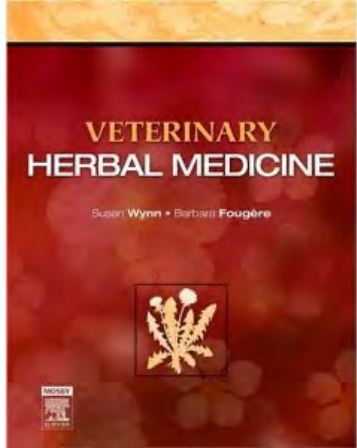




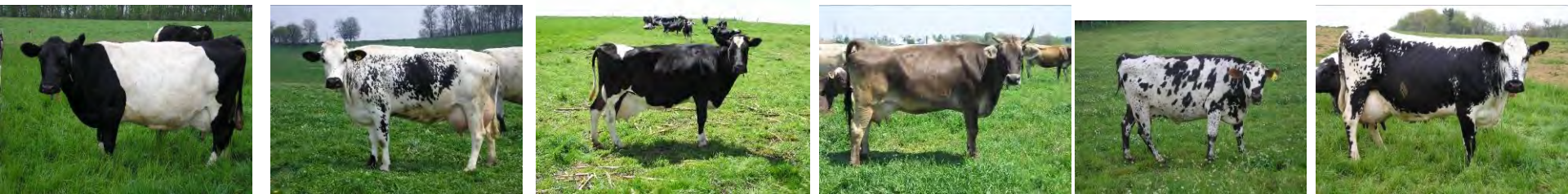
Common Dosages for HERBIVORES

Preparation	Goat/ sheep /pig	Cow	Draft Horse
Decoction (Tea)	4 oz	12 oz	8 oz
Extract powder	1 tsp	2 T	2T
Extract tablet	3-5	10-15	10-15
Freeze-dried granules	1 tsp	2 T	2 T
Tincture	5 ml	30 ml	30-45 ml

Wynn +
Fougere
Mosby, 2007



T = to 15 ml; tsp = 5 ml



Treatment for Ketosis & Pregnancy toxemia

- IV – dextrose & vitamin B complex
- Dispensed glycerin, 8 oz. twice daily as needed
- MILK THISTLE, Dandelion, Celandine tincture



High SCC & Early Mastitis

35cc Biocel CBT under skin once daily for 3 days

Milk Injections: against Strep ag mastitis

(A.S. Alexander, 1929):

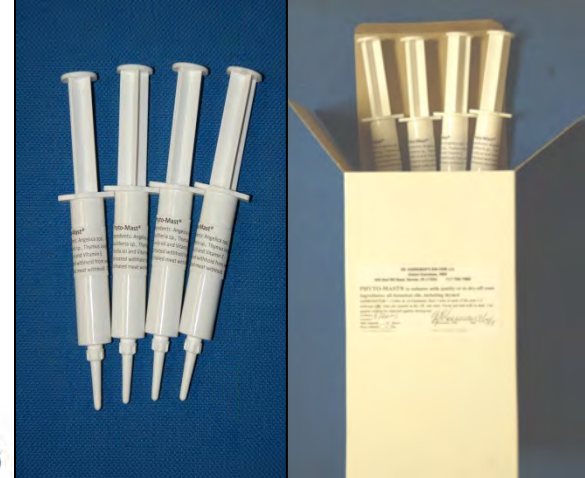
20cc clean looking milk subcutaneously every other day over 10 days, early in course of infection.

Sometimes hot reactions, but if so, will go away after 24 hours. Cows showing no reaction tended to cure.



Botanical lotions for udder health





Efficacy of a botanical preparation for the intramammary treatment of clinical mastitis on an organic dairy farm Can Vet.J. May 2013; 54(5): 479-484.

Pablo Pinedo, Hubert Karreman, Hans Bothe, Juan Velez, Carlos Risco



J. Dairy Sci. 97:3509–3522
<http://dx.doi.org/10.3168/jds.2013-7460>
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Effect of 2 herbal intramammary products compared with conventional and no dry cow therapy

K. A. E. Mullen,* K. L. Anderson,† and S. P. Washburn*¹

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†Department of Population Health and Pathobiology, North Carolina State University, Raleigh 27695



J. Dairy Sci. 97:5587–5591
<http://dx.doi.org/10.3168/jds.2013-7806>
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Short communication: An in vitro assessment of the antibacterial activity of plant-derived oils

K. A. E. Mullen,* A. R. Lee,† R. L. Lyman,† S. E. Mason,‡ S. P. Washburn,* and K. L. Anderson†¹

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J. Dairy Sci. 94:1738–1743
doi:10.3168/jds.2010-3988
© American Dairy Science Association®, 2011.

Hot topic: Milk and plasma disposition of thymol following intramammary administration of a phytoceutical mastitis treatment

C. S. McPhee,* K. L. Anderson,* J. L. Yeatts,† S. E. Mason,‡ B. M. Barlow,† and R. E. Baynes*†¹

*Department of Population Health and Pathobiology, and

†Center for Chemical Toxicology Research and Pharmacokinetics, College of Veterinary Medicine, North Carolina State University, Raleigh 27606

‡Department of Biological Sciences, Campbell University, Buies Creek, NC 27506

Thyme EO
Licorice
Wintergreen
Angelica
Vit A,D,E
Olive oil

**DRY-OFF
with Orbeseal**



**Dr. Keena Mullen -
1st person in US to get a
PhD in
the herbal treatment of
mastitis at dry-off
North Carolina State
University
Nov 5, 2013**

1 week either side of calving: Udder edema

Prevent by not free choicing salt sources - especially *not* to springing heife

Lasts longer if cow has bad uterus

Make her urinate...with

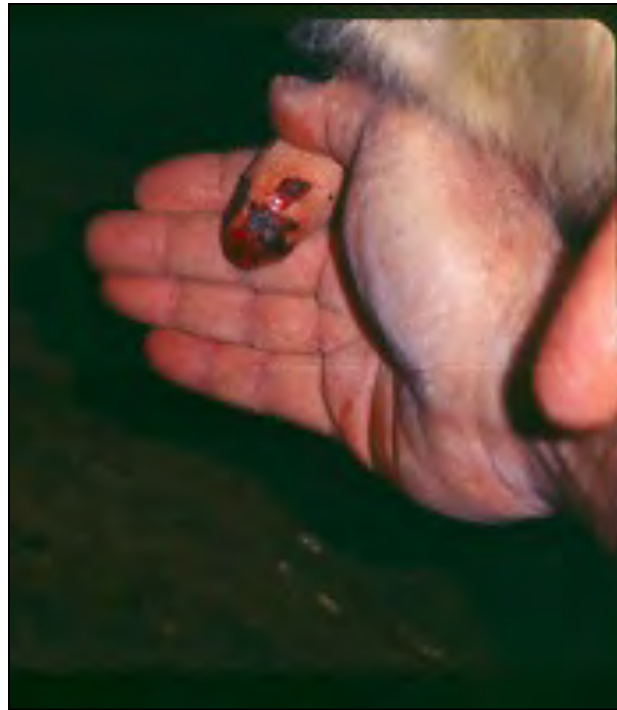


1 cow capsules orally with twice daily)



Result of long standing udder edema

Teat scrapes and skin damage



Foot Rot



Cut away necrotic area between digits & cleanse with 3% H₂O₂ or tea tree oil

Foot Rot Treatment

Mix thick paste of
Betadine® + sugar
or Honey and put on
cotton

- Wrap with digits
spread apart
- Re-wrap at least one
time 3 days later



**After 1st
treatment**



**After 2nd
treatment**



No Heats:

HEAT SEEK

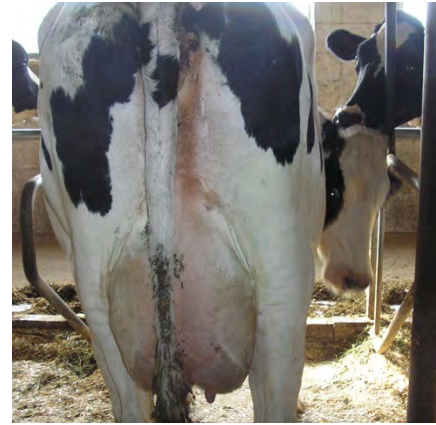
(dong quai, damiana, evening primrose, wild yam, squaw vine, cramp bark, flax)

Brings cows into standing heat.

2 tablets orally every day until heat or until finished (6 doses)

Used for cows with CL, good body condition, and more than 120 days in milk.

Cysts: Gently try to rupture, apis or lachesis followed by nat mur, acupuncture at BL 22-25; Heat Seek (12 doses)



Retained placenta:

Iodine: 1 gram every day until the cervix closes

Sub-clinical metritis at 18-21 days fresh

Infuse 30-60 ml one time:

3 parts 50% dextrose

1 part 7% iodine

Pyometra

Depends on size,

1-2 times a week for 2-3 weeks

Same ratio as above

Uterine infections

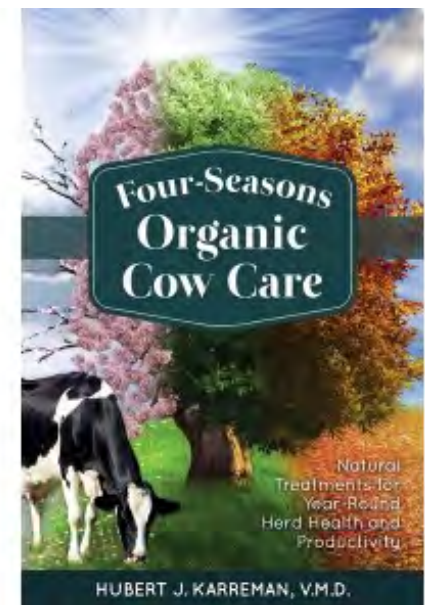
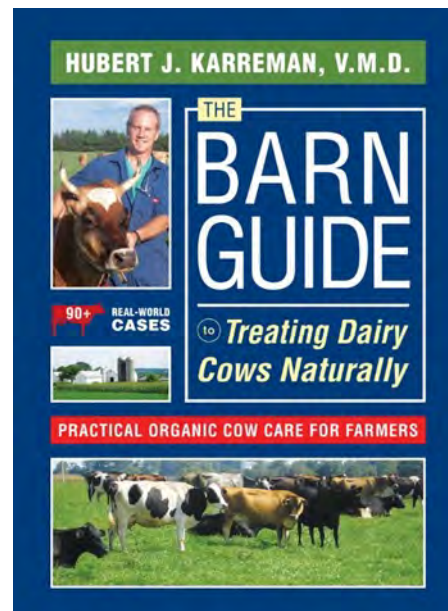
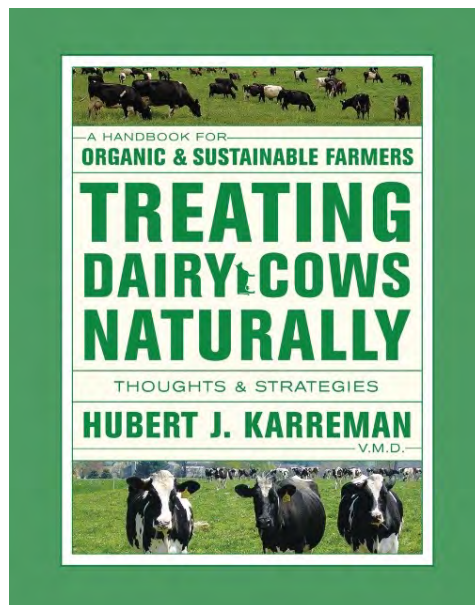


Thank you for being here today

penndutch@earthlink.net

(1) 717 - 405 - 8137

Books: www.acresusa.com



Questions?

Please type into the Q & A tab



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