Animal Operations

Developing Your Animal Farm Plans and Animal Basics Introduction -
Ruby Ward, USU

Basics of Horse Ownership
Karl Hoops, USU Extension Equine Specialist

Managing Beef Cattle in Non-Traditional Production Settings
Matt Garcia, USU Extension

So you Bought a Dairy Cow, Now What?
Allen Young, USU Extension

Establishing a Relationship with Your Veterinarian
Kerry Rood, USU Extension

Forage and Pasture
Earl Creech, USU Extension

Manure Management and Composting
Earl Creech, USU Extension

Responsible Chicken Ownership
David D. Frame, USU Extension Poultry Specialist

Developing Your Animal Farm Plans and Animal Basics

This track will be a great opportunity to get the basics on various animal topics and then have opportunities to ask experts your questions. Throughout the sessions you will get great information about what you need to know and consider about animals in general in small farm settings and also specifics on various types of animals and other issues. Each of the presentations will be given by Utah State University's Extension Specialist for that topic. Each of them will then have their own table and during and after lunch participants can sit around the tables and ask questions. Participants can stay at one table or move between to get all their questions answered. Experts on the following topics will be available: horses, cattle, small dairy animals, forage & pasture, and a veterinarian.

Ruby Ward

Professor, Economic Extension Specialist

Utah State University

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Dr. Ruby Ward was raised on a farm and ranch in South-eastern Idaho. From Texas A&M University she received an MBA and a PhD in Agricultural Economics. Dr. Ward is a professor in the Department of Applied Economics at Utah State University. She teaches agricultural finance and community planning. Dr. Ward has delivered educational programs in Utah and the surrounding region for the last 18 years. Ward currently co-chairs the Urban and Small Farms Conference in Utah. Ward is the project leader for the Rural Tax Education website (RuralTax.org) and Co-chair of the National Farm Income Tax Extension Committee.

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Animal farm Plan

Type of Animals				
Number				
Space requirements				
Vaccines/ Procedures (each year)				
Vaccines / Procedures (once)				
Feed/Nutrition Requirements				
Common Health Issues				

Contact information for Vet:

Name: Address:

Phone:

Cell:

Common things to look for to call vet:

Zoning and Regulations:

Fencing Requirements and Facilities Needed:

Manure Management Plan:

Animal Emergency Plan:

Basics of Horse Ownership

Basics of horse ownership; nutrition, vaccinations, parasite control, housing, exercise.

Karl Hoopes

Extension Assistant Professor, Equine Extension Specialist

Utah State University

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I went to University of Wyoming for undergraduate and Colorado State University for Doctor of Veterinary Medicine, graduating in 2003. I came to Cache Valley in 2003 and went to work for Valley Veterinary Services in Richmond, Utah. I became an owner/partner in Valley Vet and enjoyed private practice for 13 years. I began work at USU in August of 2015 as the Equine Extension Specialist. Horses continue to be an active part of my life. I am a member of the Cache Valley Cutter Racing Association, Utah Horse Pullers Association, and Utah Horse Council.

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Basics of Horse Ownership

Karl Hoopes, DVM

USU Equine Specialist

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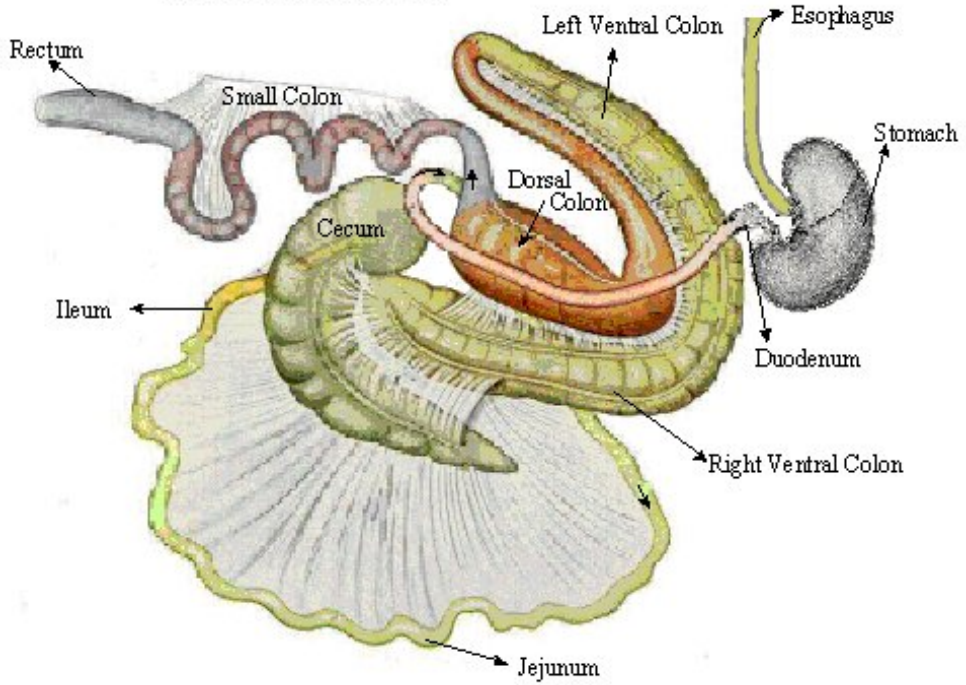
Nutrition

- Gastrointestinal Tract can be 100 ft. in length
- Horses are browsers
- Hindgut Fermenter
  - Fermentation – microbes break down cellulose into digestible nutrients
  - Located in horses in cecum and large intestine (after stomach)
  - Ruminant is located in rumen before stomach

Equine Digestive Tract

Reference: Adapted from Atlas of Topographical Anatomy of the Domestic Animals, Popesko, P., W. B. Saunders



Equine Digestive Tract - Function

Type	Fore Gut	Capacity	% of Gastrointestinal System
Enzymatic Digestion	Stomach	8 - 15 litres	8%
	Duodenum, Jejunum, Ileum (70 ft. or 21 meters)	68 litres	30%
Type	**Hind Gut**	**Capacity**	**% of Gastrointestinal System**
Microbial Digestion	Cecum (4 ft. or 1.2 meters)	28 - 36 litres	15%
	Large Colon (Right Ventral, Left Ventral and Dorsal Colons) (10 - 12 ft. or 3 - 3.6 meters)	86 litres	38%
	Small Colon (10 - 12 ft. or 3 - 3.6 meters)	16 litres	9%

- Forages (primary food source)
  - Grass pasture
  - Grass Hay
  - Alfalfa Hay
- Concentrates (only needed for addition energy needs)
  - Oats, corn, barley, mixtures
  - Generally, do not feed more than 2-3 lbs

National Research Council Nutritional needs of horse

- http://nrc88.nas.edu/nrh/

Basic Energy Requirements

Horse	Daily Digestible Energy Requirement (Mcal)
Adult 1100 lbs. maintenance	16.65
Adult 1100 lbs. Light work	19.98
Adult 1100 lbs. heavy work	26.64
Pregnant mare 7 months of gestation	17.89
Lactating mare 4th month of lactation	29.44
Weanling 7 months old 520 lbs.	16.40
Yearling 850 lbs.	19.25

Digestible Energy of Forages

Forage (Hay) 20 lbs. (9.1 kg)	Digestible Energy (Mcal)
Grass Hay - cool season - Mature	15.57
Grass Hay – cool season - immature	18.04
Alfalfa Hay	17.95

General Nutritional guidelines

- Horse can eat between 1.5%-3.5% of BW dry matter per day
  - 1000 lb. horse →15 to 35 lbs.
- Must be very careful feeding anything specific to beef
  - Ionophore toxicity
  - Other medicated feeds

Cold Weather

- The lower critical temperature (LCT) is the temperature below which the horse must increase metabolic heat to maintain normal body temperature.
- 18°F is LCT for adult horses
- 40°F is LCT for pregnant mares and young horses
- During cold weather, horses require about 15-20% more feed for each 10°F the outside temperature falls below LCT in order to maintain their normal body temperature

Vaccinations (Consult your Veterinarian)

Core vaccines

- Tetanus
- Eastern and Western equine encephalitis (EEE/WEE)
- West Nile Virus (WNV)
- Rabies (public health concern)

Risk-based vaccines

- Equine Influenza
- Equine herpes virus (EHV)
- Strangles (if stable, show, or event requires; or if environmental risk is high)

Deworming (Consult your Veterinarian)

- At least twice a year
  - After first grass comes up
  - After hard freeze (bots)
- Rotate product used

Common Products

- Ivermectin
- Praziquantel
- Pyrantel Pamoate
- Moxidectin
- Combo
  - Ivermectin
  - Praziquantel

Travel Requirements (Fact Sheet)

- Brand Inspections
  - Proof of Ownership
- Certificate of Veterinary Inspection
- Negative Equine Infectious Anemia
  - Coggins

Housing

- Horse must receive adequate exercise
  - 12 X 12 is fine if they receive enough exercise
- Horses are social animals and do better with other horses
- Prefer to be outside even in cold weather if they are provided with shelter from wind and rain

Managing Beef Cattle in Non-traditional Production Settings

General considerations and practices for raising beef cattle.

Matthew Garcia

Assistant Professor/State Beef Specialist/Beef Genomics

Utah State University

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I am the state beef specialist for USU. I am also trained as a beef cattle geneticist. I grew up on a beef cattle operation (cow/calf) in New Mexico that my family still runs today. As a state specialist I like to talk to producers about proper selection, matching production goals to resources, and the effect decisions at one production time will have upstream or downstream of the production process.

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Raising Beef in non-Traditional Settings

Animal Track: Urban And Small Farms

February 23, 2018

Dr. Matthew Garcia

State Beef Specialist/Beef Genomics

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Traditional Beef Production

Urban/Small Scale System

- Raising beef on less acreage
- Raising beef in pen settings
- Smaller area of production

Considerations

- Selecting your animal
- Containment
- Health
- Nutrient requirements
  - Stocking rate
  - Supplementation
- Determining well being
- Harvest

Selecting Your Animal

- What do your animal to do
  - Raise for meat
  - Breed
  - Raise offspring
  - Put weight on and sell
  - Show animal
- Try to have some history on the animal
  - Vaccination
  - Environment
  - Breed
  - De-worming
  - Weaning status

Selecting Your Animal

- Older animals are culls
  - Typically non-productive
  - May have health issues
- Younger animals are better for home beef production
  - Higher quality product
  - Higher growth potential
  - 100lb orphan calf has the potential to get bigger than 1000lbs
    - Be prepared for a much larger mature animal

Containment

- Proper containment is essential
  - Safety of the animal
  - Safety of the public
- Nutrition
  - Stocking rate
  - Cows will seek food

Containment

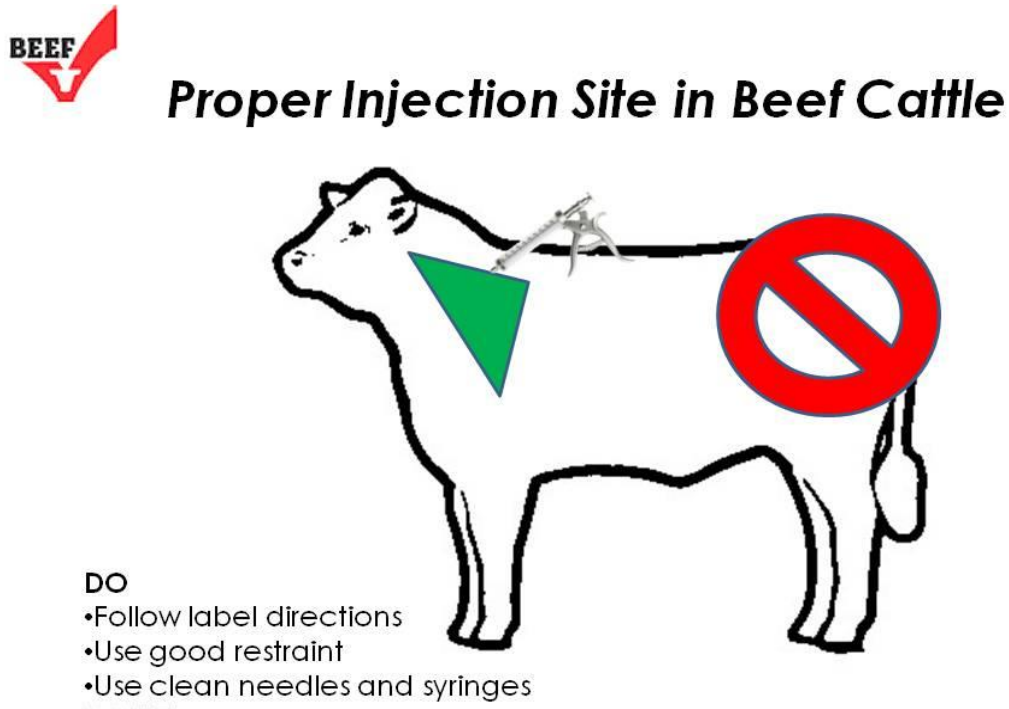
- Pens
- Fencing
- Materials for fencing
  - Wood
  - Metal
  - Barbed wire
  - Electric
  - Must be set up on a way to prevent injury to the animal
  - Ordinances
- Cows will lean on fences and scratch on posts!
  - Fences require constant checking and maintenance

Health of the Animal

- If we want the animal to be productive they must be healthy
- Vaccinations
- De-worming
- Low stress
  - Stressed animals get sick
- Quarantine new animals
- Relationship with Veterinarian
- Correlated to your containment
  - Have to handle animals for these processes

Health of Animal

- Relationship with Veterinarian
- Animals will get sick
- Antibiotic administration
  - Follow veterinarian directive
  - Follow label directions
  - Know where to inject
  - Be aware of withdrawal times!



Nutrient Requirements

- Stocking Rate/Carrying capacity
  - Number of animals on a given piece of land over time
    - Animal units per land area
  - Carrying capacity
    - Stocking rate that is sustainable over time on specific land area
- This number is very variable based on environment
  - 10-25 acres per animal unit in Utah
- Animals will trample areas near water and supplementation
  - Manure

Nutrient Requirements

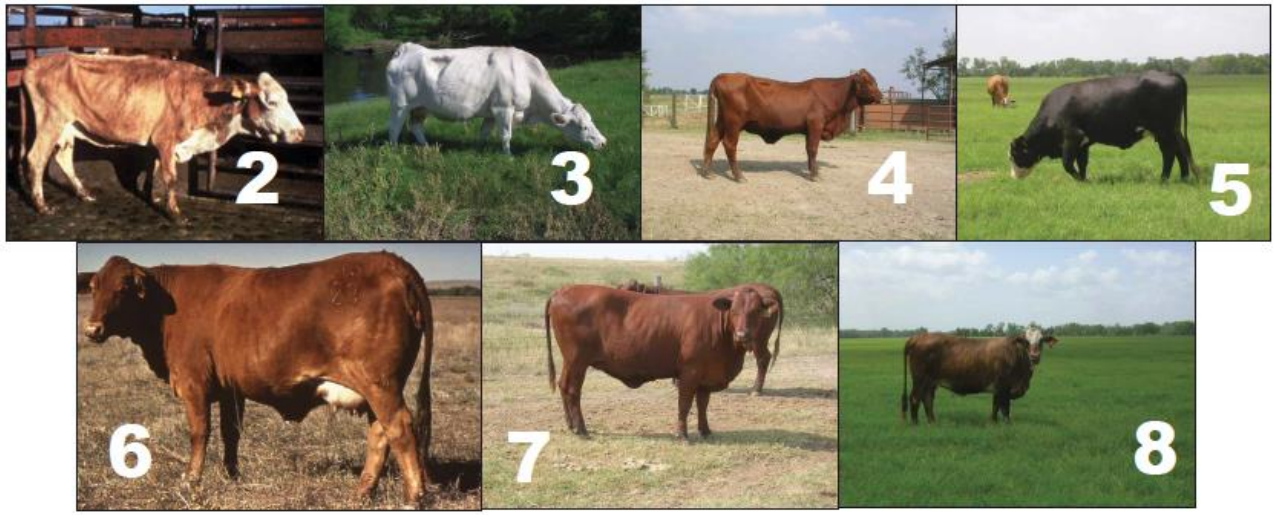
- Plenty of fresh water
- If you don’t have proper stocking rate you MUST supplement!
  - Hay
  - Protein
  - Energy (grains, corn)
  - Minerals
- What is your goal?
  - Harvest
  - Breeding
  - Raising a calf for sale

Nutrient Requirements

- Your nutrition program will affect your production significantly
  - Growth
  - Fertility
  - Rebreeding
  - Show quality
  - Meat quality
  - Time to harvest
  - Health of your animals
  - What Stage of production is your animal in?

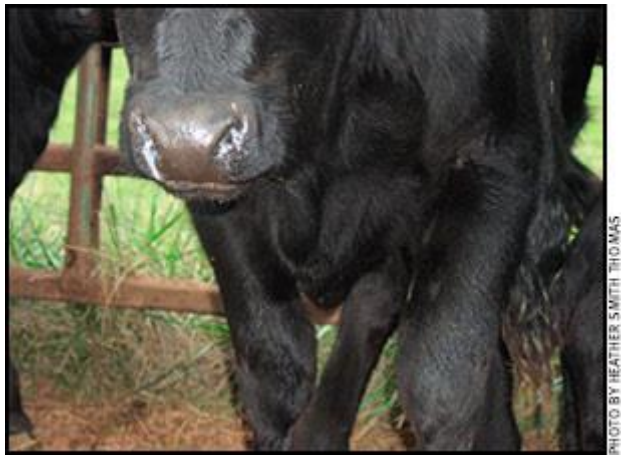
Determining Well Being

- Body condition score
  - Measure of fatness in a beef animal
    - Energy reserves in the form of fat
  - Range from 1-9
    - 1 = emaciated
    - 9 = obese
  - Indicative of….
    - Nutrition Program
    - Parasite load
    - Overall health



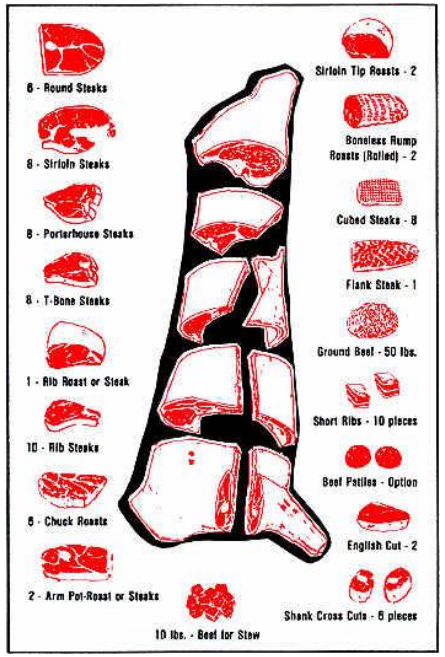
Determining Well Being

- Alert
- Appetite
- No discharge from eyes nose
- No swelling of joints
- Labored breathing
- Lethargic
- Relationship with Veterinarian
- Public perception



Harvest

- When is my animal ready to be harvested?
  - Variable
  - 1200-1400lbs
  - As animals gain more weight they begin to add more fat than muscle
- How are you going to harvest your animal?
  - At home
    - Public perception
  - At packer
    - Need transportation
- Freezer space



Summary

- Consider all the factors that are needed to keep a healthy productive animal
  - Nutrition
  - Health
  - Environment
  - Public Perception
  - Containment
  - Manure disposal

Questions

So you bought a dairy cow, now what?

Basic things to consider when buying and raising a dairy cow or goat.

Allen Young

Extension Dairy Specialist

Utah State University

allen.young@usu.edu

I am the link between the university and the dairy industry of Utah. I help transfer information developed at the university to the dairy industry and help find answers to problems. I have been at USU for almost 21 years.

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So you bought, or want to buy, a dairy animal: What do you do?

Allen Young

Extension Dairy Specialist

Utah State University

Why do you want a dairy animal?

- Lots of fresh, cheap milk
- Independence from the “grid”
- Interesting hobby
- Teach kids responsibility
- My neighbor has one

- But…
  - Not as cheap as you think
  - High degree of dependence on the animal’s schedule
  - High degree of responsibility and commitment
  - Yes, it is interesting
  - The kids…
  - Your neighbor probably doesn’t have one

What do I need to know (or ask)?

- Can I keep a dairy animal on my property?
  - Check local laws governing keeping farm animals.
- If yes, should I keep an animal?
  - What will the neighbors think, see, or smell?
- What breed or specie should I pick?
  - Cow, goat, sheep, etc.
- Do I need a license?
  - Milk is highly regulated, so know the law

What do I need to know (or ask)?

- How much space do I need?

	Dairy cow	Dairy goat
Family needs	1-2 cows	2-3 goats
Enclosed housing area/animal	75-100 sq ft	20-25 sq ft
Exercise yard area/animal	100-125 sq ft	50 sq ft
Pasture area/animal	1-2 acres	0.2-0.3 acres

What do I need to know (or ask)?

- What do I feed the animal, do I have a source, and do I have the room to store it?
  - A general rule of thumb is:
    - 2% of BW + 1/3 milk = Total Dry Matter Intake
    - 1500 lb cow giving 3 gal milk (25 lb) = 30 lb + 8 lb = 38 lb DM = 42 lb alfalfa hay
  - You can get by on 30-40 lb alfalfa/day, but it's not a balanced diet.
    - Consider some grain and definitely a mineral.
  - A ton of hay is currently ~$120
    - They will waste 5-10%
  - Pasture is good, but seasonal.
    - Weeds don't count

What do I need to know (or ask)?

- Do I have a supply of clean, fresh, close water?
  - In hot weather, a lactating cow can drink 25+ gallons per day.
  - Milk is 85-87% water
  - Washing equipment

- Do I have the facilities to restrain the animal, if needed?
- Do I have a convenient source of electricity?

What do I need to know (or ask)?

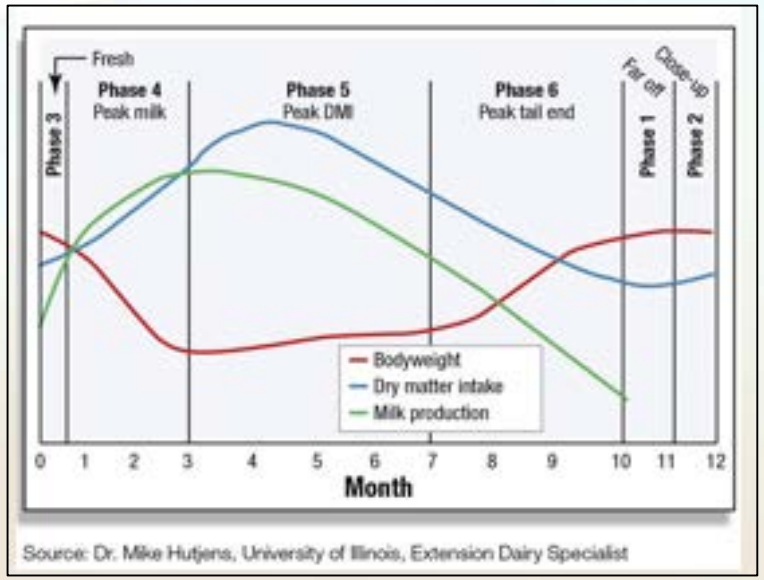
- Can I get bedding?
- Do I have the ability to handle the manure (feces plus urine)?
  - How much?
    - An adult dairy cow can produce 115 lb/d or 14 gal
      - On average, about +/- 50 of intake becomes feces
    - Goats: about 5% of BW at 60 to 70% moisture; 2000 lb/year (including waste feed)
    - Pasture helps.
    - Don’t forget to add in the bedding for disposal

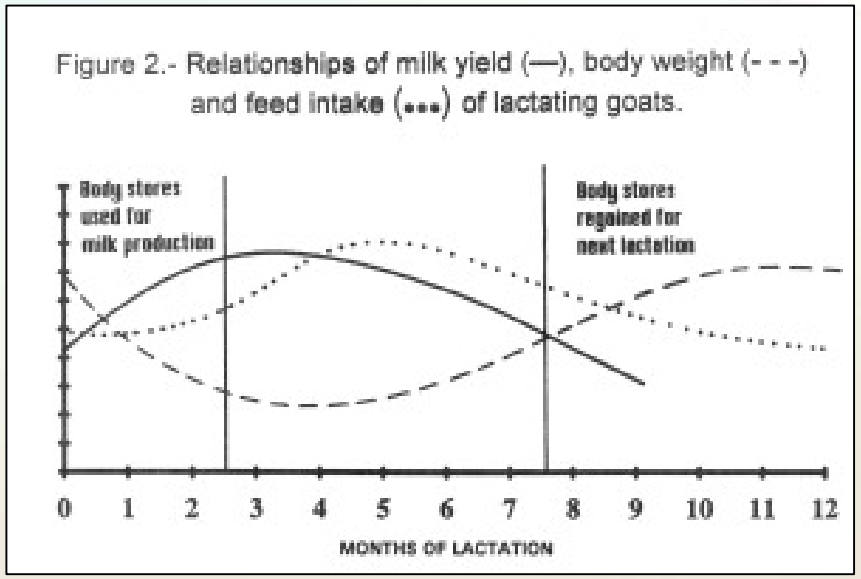
What do I need to know (or ask)?

- Health and disease prevention
  - Can I identify and treat basic health issues?
    - Ex. Mastitis
    - Health plan
  - Do I have a relationship with a competent large animal veterinarian?
    - VCPR (veterinary-client-patient relationship)
      - Antibiotic control
  - Is the animal I bought, disease-free?
    - Vaccinations, etc.

What are the pitfalls?

- What do you do when you have 3-5 gal of milk every day?





- Possible health issues with drinking raw milk.
  - Utah State Code, Chapter 3 – Utah Dairy Act and Interstate Milk Shippers (FDA)
    - Selling milk

What are the pitfalls?

- Smell, manure, run-off, flies, rats
  - Manure management on small farms
    - http://articles.extension.org/pages/8869/manure-management-on-small-farms
  - The law says it can't run off your property.
- My cow or doe needs to get pregnant at some time.
  - Bull or AI?
  - Keep bucks separated by distance from does
- What do I do with the calf?
- When the novelty wears off, who is going to do the work
  - Every single day…

Where can I get information?

- Local extension agent or specialist
- Utah State University or other universities
  - extension.usu.edu
- eXtension
  - Extension.org
    - articles.extension.org/dairy_cattle
    - articles.extension.org/goat
      - Small-scale sheep and goat production materials
      - http://articles.extension.org/pages/67784/small-scale-sheep-and-goat-production-curriculum-materials

Thank you.

Establishing a Relationship with Your Veterinarian

Attendees will gain an appreciation for involving a veterinarian in their livestock operations, understand why there is a shortage of veterinarians, and recognize the arguments for a valid veterinary-client-patient-relationship.

Kerry Rood

Extension Veterinarian

Utah State University

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Kerry A. Rood, MS, DVM, MPH, DACVPM is the associate ADVS department head and extension veterinary at Utah State University. Prior to this academic appointment, he served as the Vermont State Veterinarian and Chief Animal Health Officer. A 1997 DVM graduate of KSU, Dr. Rood has been in mixed animal practice in Oregon and Utah. Dr. Rood's specialty area is veterinary preventative medicine and public health and holds diplomate status within the American College of Veterinary Preventative Medicine (ACVPM). Kerry has received a number of wards, including undergraduate advisor of the year, teacher of the year, Utah's veterinarian of the year, and currently serves as president of the Utah Veterinary Medical Association. As part of a team, Dr. Rood was instrumental in garnering professional, public, and legislative support for the USU School of Veterinary Medicine; a joint regional program with Washington, Idaho, Montana, and Utah. Kerry is from Coos Bay, Oregon and raised on a family owned dairy and beef operation. After serving a 2-year church mission in Louisiana, Mississippi and Alabama, Dr. Rood married Rachel Taylor in 1989. They have been married for 28 years, have three daughters, and he spends his spare time supporting basketball, dance, and various school activities. If he gets any spare time, you may find him road cycling or competitive pistol shooting.

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2018 Urban & Small Farms Conference

Establishing A Relationship With Your Veterinarian

Kerry A. Rood, MS, DVM, MPH, Dipl. ACVPM

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Presentation Overview

- Veterinary Demographics
- Introduce zoonotic diseases
- Discuss potential roles veterinarians may fill on your farm
- VCPR

Goal: Provide evidence for, and reinforce the need to **consider developing a relationship with a veterinarian**

One Health

- World population > 7 billion
- Expanding population = increased exposure to disease
  - Globalization
  - 75% new diseases are either zoonotic or **vector-born**
- Environmental impacts
  - Chemicals
  - Antibiotics
- Human-animal bond
  - Pets are family

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Training

- Four year professional degree
  - Often in addition to four years of prerequisites
- Most degree programs require some clinical exposure to multiple species
  - Although tracking towards one interest area is possible, specialization takes place after degree awarded
  - National board and clinical competency examinations require familiarity with all species
- Veterinarians are required to take and document continuing education to maintain licensure

Mean Student Indebtedness 2014

$135,000

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Veterinarian's Oath

Being admitted to the profession of veterinary medicine, I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge.

I will practice my profession conscientiously, with dignity, and in keeping with the principles of veterinary medical ethics.

I accept as a lifelong obligation the continual improvement of my professional knowledge and competence.

United States' Veterinary Demographics

	Total as of December 31, 2017[1,2]	Percent of Total	Male %	Female %
Private Clinical Practice				
Food animal exclusive	1,255	1.8%	77.6%	22.4%
Food animal predominant	3,223	4.5%	75.8%	24.2%
Mixed animal	4,220	5.9%	57.6%	42.4%
Companion animal predominant	6,368	8.9%	50.6%	49.4%
Companion animal exclusive	47,545	66.6%	37.0%	63.0%
Equine	4,043	5.7%	47.0%	53.0%
Other	293	0.4%	35.5%	64.5%
Species Unspecified	4,446	6.2%	22.8%	77.2%
Total Private Practice	**71,393**	**100%**	**41.6%**	**58.4%**

From: https://www.avma.org/KB/Resources/Statistics/Pages/Market-research-statistics-US-veterinarians.aspx

- **~76%** practice companion animal medicine, either predominantly or exclusively
- Majority **(58%)** of profession is female

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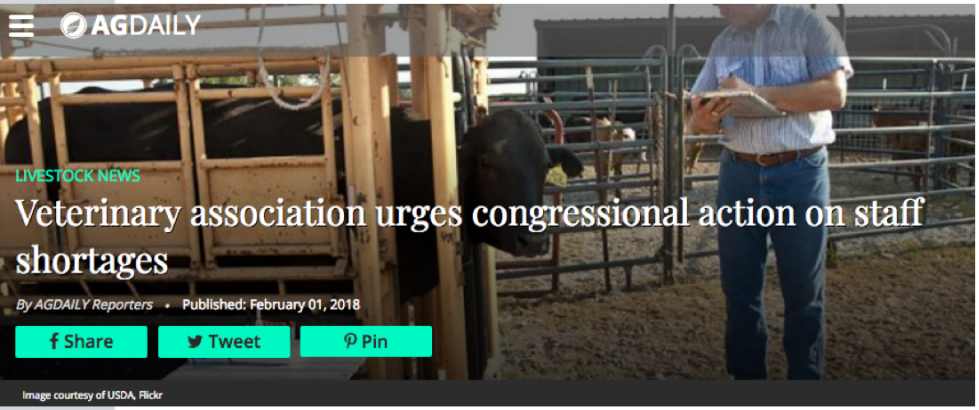
Shortage?



Shortage of vets could interrupt post-Brexit trade

BY JOHN SWIRE ON JANUARY 30, 2018

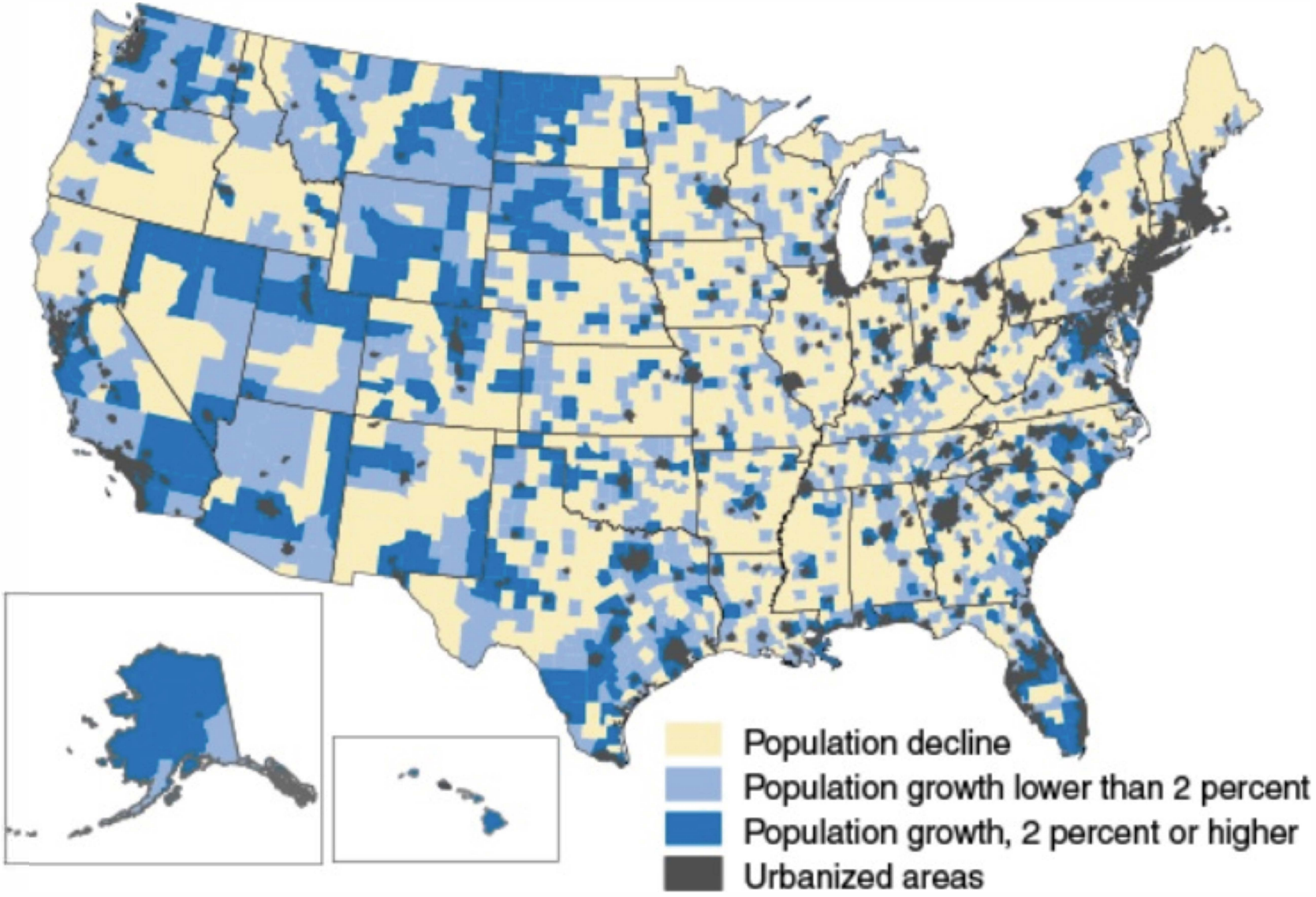
BREXIT, FOOD SAFETY, NEWS, WELFARE

AVMA seeks help with livestock, public health vet shortage

Print full article

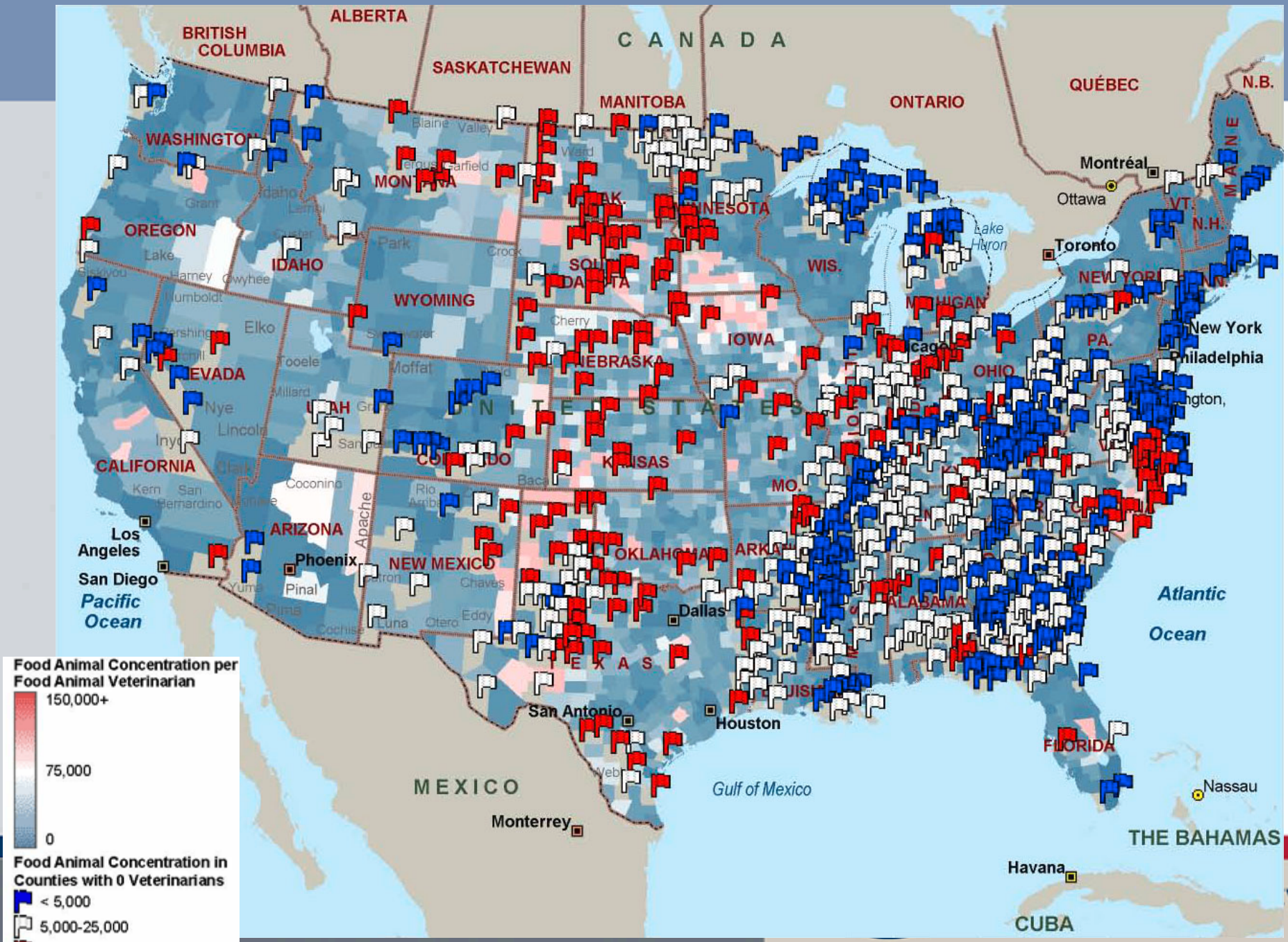
The solution is passage of the Veterinary Medicine Loan Repayment Program Enhancement Act, according to the organization

February 5, 2018



Note: Map shows population change from April 2010 to July 2012 as a percentage of the 2010 census population.

Source: USDA, Economic Research Service using data from the U.S. Census Bureau.


Food Animal Concentration per Food Animal Veterinarian
150,000+
75,000
0
Food Animal Concentration in Counties with 0 Veterinarians
< 5,000
5,000-25,000
> 25,000
CANADA
ALBERTA
BRITISH COLUMBIA
SASKATCHEWAN
MANITOBA
ONTARIO
QUÉBEC
N.B.
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
NEVADA
UTAH
CALIFORNIA
ARIZONA
NEW MEXICO
COLORADO
KANSAS
NEBRASKA
IOWA
MINNESOTA
WIS.
MICHIGAN
OHIO
PA.
NEW YORK
MAINE
VT.
N.H.
MO.
ARKA
OKLAHOMA
TEXAS
ALABAMA
FLORIDA
UNITED STATES
MEXICO
Montréal
Ottawa
Toronto
New York
Philadelphia
Chicago
Los Angeles
San Diego
Phoenix
Dallas
San Antonio
Houston
Monterrey
Havana
Nassau
THE BAHAMAS
CUBA
Pacific Ocean
Atlantic Ocean
Gulf of Mexico
Lake Huron

Conclusions: Demographics

- Veterinarians are trained, and take an oath, to advocate for animals and partner with you to help facilitate this activity
- The demographics of veterinarians continues to change resulting in shortages
- The veterinarian you work with may be a small animal practitioner who might not have as much familiarity with your species

What do veterinarians do?
Protect Animal and Public Health

- Prevent diseases
- Give advise on proper animal husbandry and handling
- Recommend preventative health protocols that are species and location specific
- Diagnose, prescribe, and offer prognoses
- Help develop a treatment plan
- Are always on the lookout for zoonotic diseases

What is a zoonotic disease?

- Zoonotic diseases are diseases humans can get from animals.
  - Examples (common)
    - Salmonella
    - E. coli
    - West Nile Virus
    - Rabies
    - Q fever
    - Ringworm

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Human Disease Impact

- 1415 species of infectious organism known to be pathogenic to humans[1]
- Out of these, 868 (61%) are zoonotic
- 175 considered to be “emerging”
- Out of the emerging pathogens, 132 (75%) are zoonotic
- Zoonotic pathogens are twice as likely to be associated with emerging diseases than non-zoonotic pathogens.

1. Taylor, LH, et al, *Risks factors for human disease emergence.* Philos Trans R Soc Lond B Biol Sci. 2001 Jul 29;356(1411):983-9.

Monkeypox - 2003

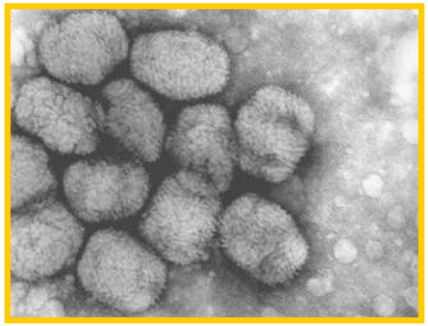
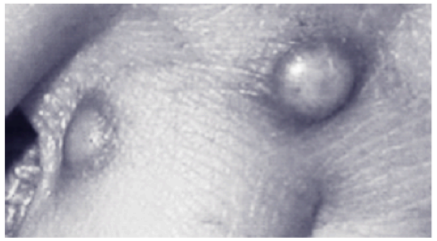
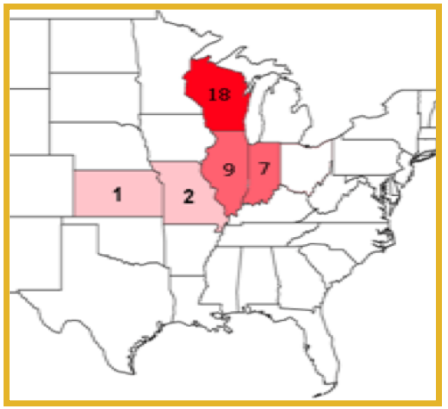


FIGURE 2. Secondary lesions of monkeypox on a patient's hand — Marshfield Clinic, Marshfield, Wisconsin, 2003



CDC



Powassan Virus

Severe tick-born Powassan virus has experts worried about possible spread

By NBC4 Staff
Published: May 7, 2017, 2:00 pm | Updated: May 7, 2017, 2:04 pm

share link

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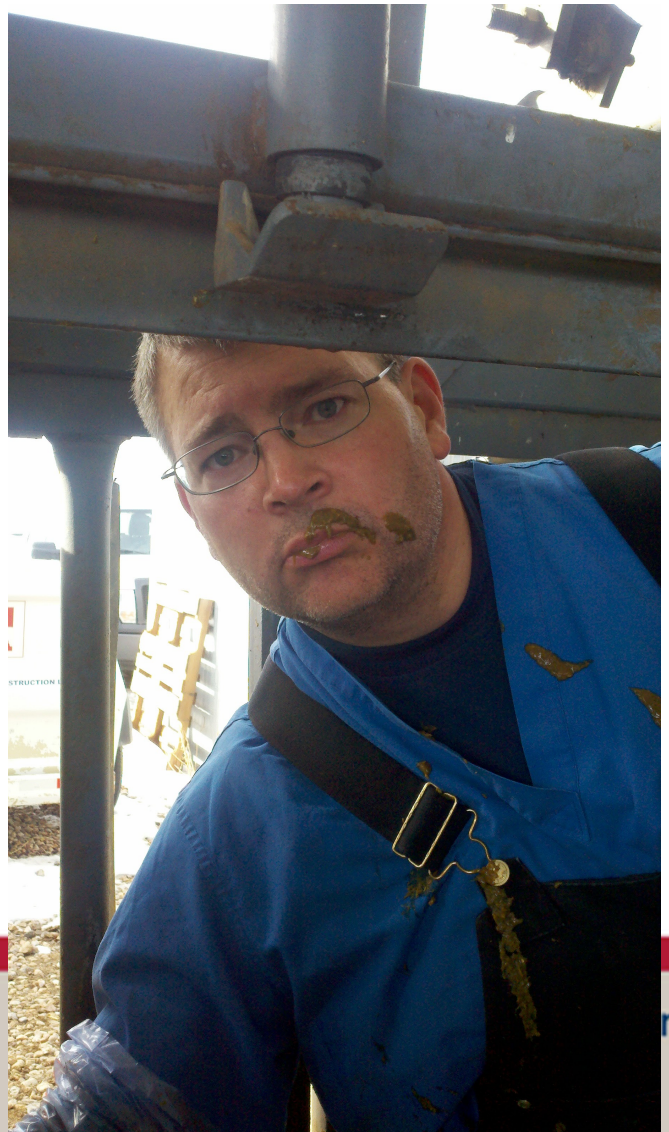
Avoiding Infectious Disease: Examples

- Don’t touch your eyes, nose and mouth
- Wear gloves & outerwear
- Never eat, drink, smoke, apply cosmetics, or handle contact lenses in animal areas or labs
- **Don’t uncap needles with your teeth**
- Properly dispose of biomedical waste
- **WASH HANDS FREQUENTLY**



Veterinary-Client-Patient-Relationship (VCPR)

- A valid VCPR is required to:
  - Prescribe medications
  - Including certain feeds through VFD
- This is obtained only after the veterinarian enters into a veterinary-client relationship and examines your animals (patient)

Emergency

- Your veterinarian can help you plan for an emergency
  - Food
  - Water
  - Shelter
  - Medications
  - Transportation
  - Evacuation plan

School of Veterinary Medicine
Utah State University

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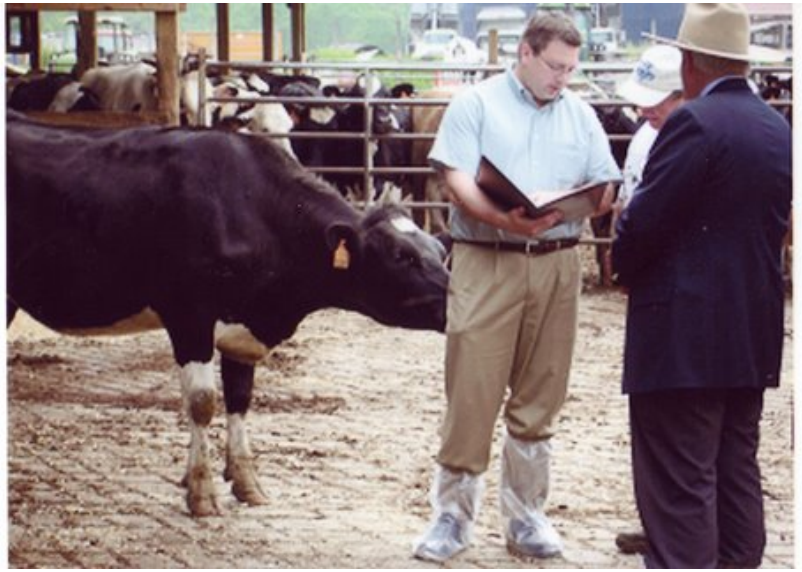
Summary

- Veterinarians are important team members to protect animal and human safety
- Culture an active Veterinary-Client-Patient-Relationship (VCPR)



Thank you

versity

Forage and Pasture

Attendees will learn the fundamentals of pasture management. Topics will include grass variety selection, planting, weed control, irrigation, and grazing management.

Earl Creech

Associate Professor, Extension Agronomist

Utah State University

earl.creech@usu.edu

Dr. J. Earl Creech is an Associate Professor and Extension Agronomist in the Department of Plants, Soils, and Climate at Utah State University, a position he has held since 2010. Earl grew up on a family livestock and crop production farm near Logan, Utah and received his B.S. and M.S. degrees from USU before receiving his Ph.D. from Purdue University. Dr. Creech's research has focused on crop production issues in dry climates.

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Manure Management and Composting

Participants will learn about manure management and the process of making compost.

Earl Creech

Associate Professor, Extension Agronomist

Utah State University

earl.creech@usu.edu

Dr. J. Earl Creech is an Associate Professor and Extension Agronomist in the Department of Plants, Soils, and Climate at Utah State University, a position he has held since 2010. Earl grew up on a family livestock and crop production farm near Logan, Utah and received his B.S. and M.S. degrees from USU before receiving his Ph.D. from Purdue University. Dr. Creech's research has focused on crop production issues in dry climates.

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Responsible Chicken Ownership Certification

Educate chicken owners and would-be chicken owners about the responsible stewardship of owning chickens.

David D. Frame

Extension Poultry Specialist

Utah State University

David.frame@usu.edu

A 1980 graduate of Utah State University with a B.S. in Animal Science, Dr. Frame subsequently received his DVM degree from Oregon State/Washington State Universities in 1984. Dr. Frame completed an avian medicine residency with the University of California, Davis specializing in poultry pathology and diagnostics. He is board certified in the American College of Poultry Veterinarians. Dr. Frame was employed as chief veterinarian for Moroni Feed Company (Norbest) for 12 years before joining the faculty of the USU Animal, Dairy, and Veterinary Sciences Department in 1998 as an Associate Professor. He currently serves as the USU Extension Poultry Specialist with an additional assignment as poultry diagnostician for the Utah Veterinary Diagnostic Laboratory. He has served on various national boards, including the General Conference Committee of the National Poultry Improvement Plan, an advisory committee to the United States Secretary of Agriculture. He presently serves as editor for the Western Poultry Disease Conference, an internationally renowned poultry disease forum. Before beginning a professional career in poultry extension and diagnostics, Dr. Frame raised and showed many different breeds and varieties of exhibition chickens.

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Responsible Chicken Ownership Certification

David D. Frame and Ron Patterson

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OBJECTIVES

1. Educate chicken owners and would-be chicken owners about:

A. the responsible stewardship of owning chickens.

B. the importance of proper restraint, handling, feeding, and management of chickens

C. the importance of biosecurity and being a good chicken-owning neighbor

D. the proper care and handling of poultry products (i.e., meat and eggs), mortality, and disposal of litter

2. Serve as a validation for communities, municipalities, and/or other interested groups of some level of assurance that the recipient understands the appropriate care and raising of chickens.

Curriculum

Introduction:

- history of the chicken, term definitions

Management

- acquiring chicks, brooding, raising to adulthood

Nutrition

- Proper diet, nutrients, feedstuffs

Curriculum

Health and Wellness:

- Focus is on keeping chickens healthy and recognizing common abnormalities

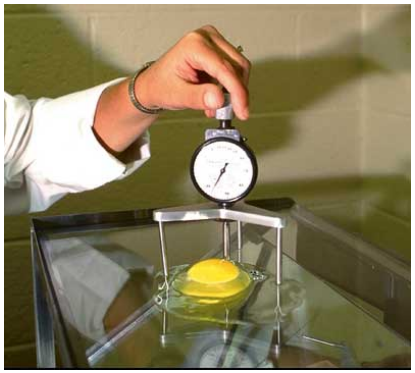
Curriculum

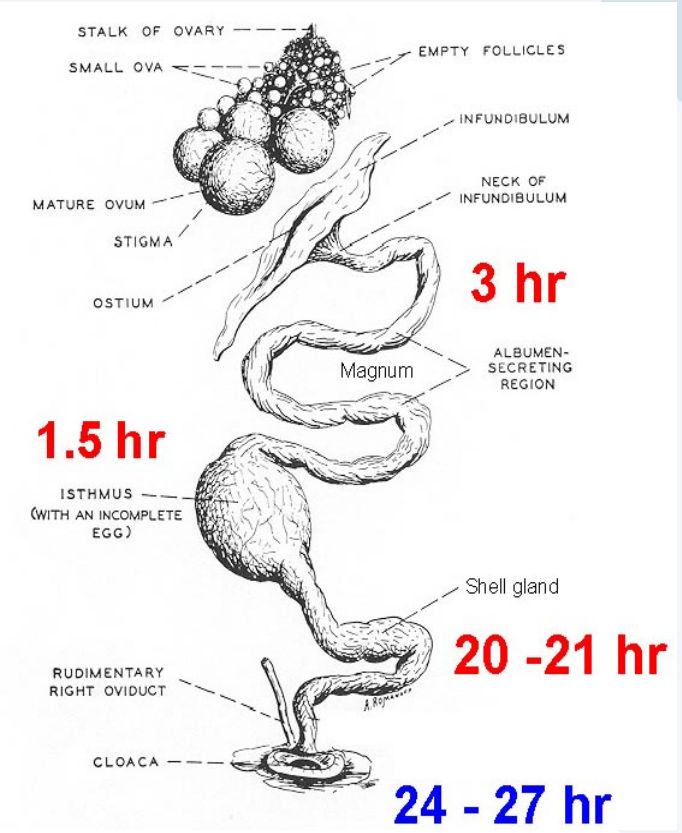
Biology of the Chicken:

- Anatomic and physiologic considerations as they apply to practical care and management

Egg Production

- Reproductive physiology of the laying hen, egg quality, and egg handling.





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UtahStateUniversity

23 February 2018
Urban and Small Farms Conference

Curriculum

Final Examination, Questionnaire, and Wrap-Up

EXTENSION
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23 February 2018
Urban and Small Farms Conference

Evaluation

Final Examination

- to review and re-emphasize basic chicken care, management, feeding practices, and social responsibilities

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Outcomes

Certificate of completion

- Validation record


CERTIFICATE *of* COMPLETION

THIS ACKNOWLEDGES THAT

Participant's Name

HAS SUCCESSFULLY COMPLETED THE

Utah State University Extension
Responsible Chicken Ownership Course

18 October 2017

SIGNED, *David D. Frame*,
USU Extension Poultry Specialist

SIGNED, *Ron Patterson*,
USU Extension, Weber County

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Utah State University is an affirmative action/equal opportunity institution.

Acquired skills

- knowledge and familiarity with basic chicken care, management, feeding, and social responsibilities.

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Utah State University Extension
Responsible Chicken Ownership Certification
Ogden, Utah – October 17-18, 2017

Overall Evaluation (Circle a number 1 through 5 for each response)

	Excellent <<					>> Poor
Selection of topics		5	4	3	2	1
Overall quality of speakers		5	4	3	2	1
Time allowed for presentation		5	4	3	2	1

Please rate your experiences about this class by circling the appropriate response for each of the following questions.
(SA=strongly agree; A=agree; N=neutral; D=disagree; SD=strongly disagree)

I will make changes because of what I learned.	SA	A	N	D	SD
The printed material was beneficial.	SA	A	N	D	SD
I was able to understand most of what I heard and saw.	SA	A	N	D	SD

Please help us plan for improvements to this certification by providing us with your following input.

I learned about this course from _____ (flyer, friend, etc.)

What did you benefit most from this course? (Use back if necessary)

Tell us what we need to include in future classes. (Use back if necessary)

What will you change as a result of attending? (Use back if necessary)

What type of chicken raising are you <u>currently</u> involved in? (Circle all applicable.)
a. Breeder/sales b. To produce home eggs c. To produce home meat d. Exhibitor
e. Presently do not own chickens f. Other _____

THANK YOU FOR ATTENDING!!


E
W
N

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RESPONSIBLE CHICKEN OWNERSHIP

RESOURCE MATERIALS

Responsible Chicken Ownership Curriculum

Introduction
Brief history of the chicken
Definitions of terms associated with poultry
Explanation of standard-bred, commercial strains, and uses (egg, meat, or dual-purpose)

Management
Management considerations associated with acquiring chicks, brooding, feeds and feeding, and raising to adulthood

Health and Wellness
This section will focus on keeping birds healthy and how to recognize general abnormalities. Appropriate biosecurity principles will also be introduced.

Biology of the Chicken
Anatomic considerations as they apply to practical care and management.
Molting

Egg Production
Reproductive physiology of the laying hen
Egg quality
Egg handling

Final Examination and QAs