



2019 Wisconsin Dairy Well-Being Roadshow

March 19th – Platteville March 20th – Eau Claire March 21st – Wausau March 28th - Elroy







This program is presented to you by:

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UNITED TO GROW FAMILY AGRICULTURE





Order of topics subject to change

10th Annual Wisconsin Dairy Well-being Conference

9:45 am	Registration
10:00 am	Group housing calves – Jennifer Van Os
11:15 am	Understanding normal to identify abnormal – Sandy Stuttgen or Alana Voss
12 Noon	Lunch
1:00 pm	Dehorning and pain mitigation – Sandy Stuttgen or Sarah Mills-Lloyd
2:00 pm	Technology benefits to animal health – Heather Schlesser or Lyssa Seefeldt
3:00 pm	Q/A, Wrap-Up, and Certificate Distribution

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Please consider sending them a thank you note for making this conference possible

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Wisconsin Beef Council

632 Grand Canyon Drive Madison, WI 53719 Phone: 608.728.BEEF (2333) Web: <u>http://beeftips.com</u> Organic Valley One Organic Valley Way La Farge WI 54639 Phone: 888.444.6455 Web: <u>http://organicvalley.coop/</u>

Bronze

Advanced Comfort Technology

752 Lois Drive Sun Prairie, WI 53590 Phone: 608.709.2693 Web: http://www.dccwaterbeds.com/

Wisconsin Farmers Union

117 W. Spring Street Chippewa Falls, WI 54729 Phone: 715.723.5561 Web:

http://www.wisconsinfarmersunion.com

PDPW

820 North Main Street, Suite D Juneau, WI 53039 Phone: 800.947.7379 Web: <u>http://pdpw.org</u>

Wisconsin Farm Bureau Federation

P.O. Box 5550 Madison, WI 53705 Phone: 800.261.FARM (3276) Web: <u>http://wfbf.com</u>







Wisconsin Beef Quality Assurance & Dairy-Beef Quality Assurance
Re-certification Continuing Education Program
The 2019 Wisconsin Dairy Well-Being Conference Roadshow
(Attendee's signature)
Location Date
By signing and dating this certificate, the individual confirms their attendance at this location and is awarded Two (2) Continuing Education Credits
Approved by Sandia Stuttger UW- Madison Division of Extension
Retain this certificate, return it to the WI BQA Program at the time of your re-certification. Keep copies of certificates for your own records. This certificate is not intended for initial BQA Certification.
Wisconsin BQA & Dairy-BQA Re-Certification Program
 Who should become certified? Anyone raising beef or dairy cattle in all types of production systems. Farms and individuals can be certified in the program. How can a producer or farm become certified initially? 1. Attend a Beef or Dairy Quality Assurance training session conducted by a WI-BQA certified trainer

- 1. Complete the certification test and personal contract
 - 2. Pay \$15 to WI Quality Assurance for manual and certification
- 2. Or complete online National BQA Training at http://www.bqa.org/certification

How long is certification valid?

Certification is valid for 3 years.

Will I be notified when my certification expires?

Note the expiration date on your certificate, and file the certificate for later reference.

It is your responsibility to renew your certification.

How can I become re-certified?

1. BQA certified individuals may submit three (3) re-certification continuing education credits (CEC) to the Wisconsin Beef Council at: WI Beef Council, Inc. Attn. WI BQA Program, 632 Grand Canyon Drive, Madison, WI 53719 There is no charge to use the CEC process to re-certify.

Pre-approval of CEU is at the discretion of the Wisconsin BQA Management Team. Examples of programs that *may* qualify are UW-Extension Cattle Feeders Workshops, Northwest Beef Producers clinics, the WI Dairy & Beef Well-Being etc.

2. Those individuals who certified on-line may re-recertify by re-taking an online course available at BQA.org



CERTIFICATE OF ATTENDANCE

Attendee's name and signature

Location

Date

By signing this certificate, the attendee verifies that they have attended and participated in the The 2019 Wisconsin Dairy Well-Being Conference Roadshow held at this location. Attendance is also verified by the hosting Extension office.

THIS PROGRAM HELPS FARMS TO MEET THE TRAINING REQUIREMENTS OF THE NATIONAL DAIRY FARM PROGRAM. FARM OWNERS, MANAGERS, AND EMPLOYEES MUST DOCUMENT THEIR ATTENDANCE OF THIS TRAINING AND KEEP RECORD OF IT FOR WHEN THE FARM IS EVALUATED FOR THE FARM PROGRAM. ANNUAL TRAINING OF EMPLOYEES IS A MINIMUM PARTICIPATION REQUIREMENT OF FARM.

Hert &

Sandia Stuttger

Heather SchlesserSandra StuttgenCo-Chairpersons, 2019 Extension Dairy Well Being Roadshow



Dairy Well Being	Roadshow	Location_	Date
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Please provide the following demographic information about yourself.

Do not write your name on this document.

This information is used to ensure our programming is reaching diverse audiences and to fulfil our obligations as a recipient of federal funding. You reserve the option to not provide this demographic information. Should you choose to not provide this information, please choose "Prefer not to respond."

Please indicate your race. Choose only one answer.

- **m** American Indian and Alaska Native
- **m** Asian
- m Black or African American
- **m** Native Hawaiian and Other Pacific Islander
- m White
- **m** Two or more races
- m Prefer not to respond

Please indicate your ethnicity. Choose only one answer.

- **m** Hispanic or Latino
- **m** Not Hispanic or Latino
- **m** Prefer not to respond

Please indicate your gender. Choose only one answer.

- **m** Female
- **m** Male
- **m** Prefer not to respond

Please indicate your age. Choose only one answer.

- **m** Adult (19 years or older)
- **m** Youth (18 years or younger)
- m Prefer not to respond

Please indicate your county of residence

A [photo/videographer] may be taking videos and pictures of the participants during this event. UW-Extension will use these videos and pictures in a manner consistent with UW Division of Extension's mission. Your attendance at this event indicates your consent for your image to be recorded and used in this manner.

Continued on the back...

What is your occupation? Circle all that apply.

Farmer/Manager	DVM	Vet Tech	Student	Educator	Agri-business
Government Agenc	у	Media	Non-agric	ulture employ	nent

<u>If a dairy farmer or manager</u>: # adult dairy cattle ____ calves: # bulls____ # heifers____ Farm employees: #___ English speaking, # ___ Spanish speaking # ___other language spoken and list _____

If a veterinarian or other agribusiness professional:

How many dairy cattle, heifers, and calves do you work with per month?

If a government agency, which agency?

If media, how many subscribers does your publication reach?

Have you attended previous WI Well-Being conferences? Check all that apply.

- **m** First Conference
- **m** 2010, Kimberly
- **m** 2011, Neillsville
- m 2012, Madison
- m 2013, Kimberly, WI
- m 2014, Eau Claire, WI
- m 2015, Kimberly, WI
- m 2016, Platteville, WI
- m 2017, Stratford, WI
- m 2018, Green Bay

If you have attended previous conferences, what value have these conferences had for you? *Check the one best answer that applies.*

- m Excellent value, I learned concepts/techniques applicable to me.
- **m** Valuable, I enjoy attending these conferences and I generally learn a few things I can use on my farm, in my practice, in my business.

your practice or in your business:

Please list content which you learned from past

conferences that you have put to work on your farm, in

- **m** I attend in hopes of learning something new that I can use on my farm, in my practice, or in my business.
- **m** I keep attending because I know I will learn something new which I can use on my farm, in my practice, in my business.

Is more education concerning Animal Husbandry needed in Wisconsin? Yes No

If so, what topics would like to learn about?

Any speakers you would recommend?

Optional Survey for Dairy Farmers/Managers/Employees Only:

Please indicate the dehorning/disbudding techniques currently used on your farm, or on the calf ranch where your calves are raised. There are no 'right' or 'wrong' answers. You reserve the option to not provide this information by not completing this survey. The responses will be aggregated. Individual responses will not be shared.

Check all that apply

- Calves are not dehorned (either on my farm or by heifer raiser)
- O I do not know how my calf raiser dehorns or disbuds calves
- Polled genetics used
- O Dehorning/disbudding is performed by a veterinarian
- O Dehorning/disbudding performed by a non-veterianian I hire who is not my employee
- O Dehorning/disbudding performed by myself or my employee
 - Trained by a veterinarian
 - Performed without veterinary training
- Disbud/dehorn calves with hot iron, at what age?
 - o Clip hair before apply hot iron
 - o Lidocaine nerve block placed before hot iron applied
 - o Pain medication administered before hot iron applied
 - Sedation given before hot iron applied
 - Pain medication administered day after hot iron applied
- Disbud calves using chemical dehorning paste, at what age?
 - Clip hair before apply paste
 - o Liodocaine nerve block placed before paste applied
 - o Sedation given before paste applied
 - Pain medication administed before paste applied
 - Pain medication administed day after paste applied
 - Apply duct tape or other barrier (list) ______ to the area
- O Dehorn using gouge or scoops, at what age?
 - Clip hair before use gouge or scoops
 - Liodocaine nerve block placed before gouge or scoops applied
 - Sedation given before gouge or scoops applied
 - Pain medication administed before gouge or scoops applied
 - Pain medication administed day after gouge or scoops applied

Group housing of preweaned calves: A win-win for calf performance and animal welfare

Jennifer Van Os Assistant Professor Extension Specialist in Animal Welfare Department of Dairy Science at UW- Madison





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Jennifer Van Os joined the faculty of the Department of Dairy Science at UW-Madison in 2018 as an Assistant Professor and Extension Specialist in Animal Welfare. Dr. Van Os received her PhD in the interdisciplinary Animal Behavior graduate program at the University of California-Davis and conducted postdoctoral research in the Animal Welfare Program at the University of British Columbia. The research in her lab at UW-Madison focuses on understanding, evaluating, and improving the welfare of dairy animals from a biological perspective. The goal of Dr. Van Os' extension program is to promote best practices in management and housing to help the Wisconsin dairy industry adapt as our scientific knowledge about animal welfare continues to grow.















70% of US calves are housed singly through weaning



70% of US calves are housed singly through weaning



Why?

- Concerns about calf-to-calf disease transmission
- Ease of individual monitoring

However, disease transmission can be reduced by other means: ✓ All-in/all-out grouping ✓ Colostrum protocol ✓ Bedding

- ✓ Sanitation
- ✓ Ventilation







Dr. Nigel Cook (UW School of Vet Med / The Dairyland Initiative) predicts that pair- or group-raising will become the standard practice within less than a decade

Social housing is already mandated by law in parts of Europe (as is feeding milk through a teat)



first 2 weeks = single OK



> 2 weeks old = pairs or groups











































pre-weaning bodyweight gains predict future productivity, especially first-lactation milk yield Heinrichs and Heinrichs, 2011; Soberon et al., 2012, Ven De Stroet et al., 2016



































Rekia Salter, UW-Madison master's student: Feeding strategies to mitigate cross sucking

How can cross sucking (and feed competition) be reduced in pair-housed calves?



Kim Reuscher, UW-Madison master's student: Interactions of heat/cold stress with social housing

Braden bottle



teat bucket

How does social housing affect thermal comfort of calves?

2 calves \rightarrow increased heat load inside hutch?



Do calves show a preference for cooler internal hutch climate? (elevated vs. not?)



Take-home messages



Two heads are better than one!

- Social housing for pre-weaned calves = a win-win for welfare & performance
- Common questions: disease transmission, cross-sucking, feed competition... These can be managed without isolating calves, and more research is ongoing





Understanding normal to identify abnormal

Sandy Stuttgen Associate Professor UW-Madison Division of Extension

Alana Voss Agriculture Educator UW-Madison Division of Extension





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Sandy Stuttgen is an Associate Professor with UW-Extension and serves as the Agriculture Educator for Taylor County. Sandy has worked as a statewide Extension Beef Team Specialist. Her focus areas include cattle wellbeing and beef quality assurance programming, farm financial risk management, and farm succession. She joined UW-Extension following a career as a large animal, predominately dairy veterinarian. Sandy earned a Bachelor of Science degree in Bacteriology from UW-Madison and her Doctor of Veterinary Medicine from the UW-School of Veterinary Medicine





Alana Voss Phone: 608-477-3945 Email: <u>Alana.voss@wisc.edu</u> Web: <u>https://sauk.extension.wisc.edu/</u>

Alana Voss is the Juneau and Sauk Counties Agriculture educator. Her program areas focus on crops and soils, and dairy and livestock for Juneau and Sauk Counties. She provides resources and education to individuals involved in agriculture and to those wanting to learn more about agriculture in their communities. Prior to her role, she was the interim Agriculture educator in Adams and Juneau Counties. Additionally, she continues to work on her family's cash crop farm where they grow corn and soybeans. Alana graduated from UW-Platteville with a bachelor's degree in agriculture business with an emphasis in marketing and communications and a degree in animal science with an emphasis in dairy.



Understanding What's Normal

Five Freedoms

Freedom from

Hunger and Thirst Discomfort Pain, Injury or Disease Fear and Distress

But how do we know??

Freedom to Express Normal Behavior

European-wide project Welfare Quality

Declining Emotional State								
Happy Content Positively occupied Friendly Relaxed Calm	Active Sociable Playful Lively Inquisitive	Uneasy Bored Indifferent	Fearful Apathetic Frustrated Agitated Distressed Irritable Aggressive					

Anthropomorphism

Attributing human traits, emotions, or intentions to non-human entities.

It is considered to be an innate tendency of human psychology.

People have also routinely attributed human emotions and behavioral traits to wild as well as domesticated animals.

Source: Wikipedia, the free encyclopedia, https://en.wikipedia.org

For those not familiar

How do we teach 'apathetic' vs 'indifferent'?

Are happy cows even found in Wisconsin?

Should cows be humanized?

Zoomorphism

Assigning a person, event, or a deity with animalistic characteristics.

Opposite of Anthropomorphism.

Do we learn about cattle by walking in their hooves?

Should we learn animal emotion or behavior?

Let cows be cows

Use their behavior as an indication of their well-being

Use their behavior to facilitate our handling

Herd behavior

- Instinct: social animals evolved to reduce the risk of predation isolation is avoided
- Dominant animals stay in the middle of the group
 - lead the herd by 'pushing' rather than 'pulling'
 - subordinate cattle move to the front
 - great reluctance to be in the back: highest risk of predation
 - walk along in rank without overtaking each other
- Movement of one cow triggers the movement of others, orderly file Pace: less than 3 mph, with their heads slightly down

Understanding the five senses of cattle

Vision: dominant sense

Accounts for 50% of their sensory information Monocular 330° peripheral vision Limited binocular vision in front Clearest vision here and depth perception Will lower their head and face the object they are inspecting Blind spot in the rear Dim lighting hinders their vision Less able to discriminate objects that differ in light intensity

Flight Zones

Point of balance Speed = pressure







Smell

Hearing

Avoid places containing urine from stressed animals

Dislike smells of dung and saliva

Herd hierarchy linked to smell

Very sensitive to high frequency

16 – 40,000 Hz range

Use sight to determine the source of the sound

Dislike the sound of human voice

Taste

Taste receptors located on the tongue 2-3X more taste buds than humans Select food based on taste and texture, will sort feed Able to distinguish sweet, salty, bitterness, acidity; Need to mask bitterness Are suspicious of novel tastes (and smells) Prefer to eat with their head down (grazing) Will choose the cleanest, freshest water; positioned low with large surface



Touch

Use their tongue for touching

Skin receptors detect pressure, movement, temperature, inflammation Thermoreceptors and mechanoreceptors in skin, throat and nasal passages perceive ambient temperature, relative humidity, wind speed

- learn their thermoneutral zone
- modify their behavior to seek cooler/warmer locations
- increase their respiratory rate to cool themselves
- reduce feed intake when hot to reduce metabolic heat Sensitive to low-level electric currents

Normal physical exam

Temperature 101.1°F	>102.5°F uncomfortable, 'off-feed' >104°F is an emergency >106°F emergency, heat stroke				
Respiratory rate 30 breaths/min	little movement of ribs limited ability to sweat increase rate, pant to dissipate heat				
Heart rate 60-70 beats/min	jugular pulse not readily apparent				
Rumen left paralumbar area	3 ruminations per minute				

Typical daily time budget: hours/day

Lying/resting	12-14 (higher production lays the longest)
Ruminating	7-10 (majority while laying)
Eating	3-5 (9-14 meals/day); higher production = $5 - 5.5$
Drinking	0.5
Socializing	2-3
Traveling	2.5-3.5 (milking, outside of pens, etc)

Resting & standing

Lay 14-16 hours per day Rest on their chests, both or just one front foot tucke

Stand with equal weight distribution on all four feet Flat back, not arched Head flat or lowered to graze Tail not raised, not wagging

Hock and knee lesions

FARM Program goal: 95% or more of lactating and dry cows score 2 or less.

- #1 Hock: Hair loss less than quarter sized, no lesion or swelling Knee: hair loss on front of knees, less than quarter sized
- #2 Hock: Hair loss at least quarter sized, now swellingKnee: Hair loss greater than a quarter
- #3 Hock: severe swelling and/or abrasion through the hide Knee: Hair loss > a quarter, and swelling in both knees

FARM locomotion scoring

Goal: 95% or more od lactating and dry cows score 2 or lower

#1 Sound: normal posture and normal gait

- #2 Moderate lameness: stands well, favors a limb when walking
- #3 Severe lameness: unable to mover or able to move but barely able to bear weight on the affected limb. Signs also include arched back, poor body condition, head bob and an inability to flex lower leg joints.

**includes scores 3-5 on the previous chart

Body Condition Score

FARM goal: >99% score 2 or greater

- Five-point FARM Program Body Condition Score
 - #1 Gaunt, no fat tissue around tail hear or short ribs
 - #2 Shallow cavity around the tail head
 - #3 Good condition: fat cover over tail head, short ribs#4 No depression in the loin area and short ribs can
 - not be felt, barely seen
 - #5 Thick fat layer around short ribs and over tail head region

Taken out of context

Body condition score relevance to production type and stage of lactation Pasture-based systems Higher production, or elite type (genetics) Breed differences Thin cows are not necessarily unhappy (poor welfare) Fat cows are not necessarily happy (better welfare)

Body image: hygiene scores

FARM program goal: 90% or more score 2 or less

- #1 Clean
- #2 Manure splatters on lower leg
- #3 Manure splatters on upper leg, udder and lower belly
- #4 manure splatters on udder/belly and toward top of cow

Behavior of the caretaker

To improve stockpersonship

pay attention to job satisfaction of the people

- education
- properly designed, safe facilities
- appropriate equipment, that is functioning correctly
- culture of care don't blame, encourage sharing

Stockpersonship resources

National Dairy FARM program - https://nationaldairyfarm.com/

Cow Signals Training Company - https://www.cowsignals.com/

Animal Care Training - https://www.animalcaretraining.org/

Our discussion today has focused on normal behaviors and appearances...everyone must first know what normal looks like before they can begin to identify abnormal. They must notice the abnormal, and take steps to allow cattle to be well.



Dehorning and pain mitigation

Sandy Stuttgen Associate Professor UW-Madison Division of Extension

Sarah Mills-Lloyd Associate Professor UW-Madison Division of Extension





Sarah Mills-Lloyd Phone: 920-834-6845 Email: <u>sarah.millslloyd@wisc.edu</u> Web: <u>https://oconto.extension.wisc.edu/</u>

Sarah Mills-Lloyd is the University of Wisconsin-Extension Oconto County Agriculture Agent specializing in dairy and livestock. Prior to joining the University of Wisconsin- Extension, she practiced as a large animal veterinarian in northeast Wisconsin. Sarah's research emphasis is on animal health and husbandry. She incorporates new innovative technologies with university-based research to provide educational and outreach efforts for producers focusing on animal well-being, calf management, and transition cow management. Sarah has a doctorate of veterinary medicine from the University of Wisconsin-Madison.



Dehorning Calves Using Pain Mitigation Techniques

Quiz to assess your learning **BEFORE** watching the Extension teaching video. There is one correct answer per question. Check your response. Rather than guess, please select 'I don't know'.

- 1. The pain of dehorning calves can be eliminated by using polled genetics.
 - □ True
 - □ False
 - □ I don't know
- 2. Prescription drugs can be used to minimize the pain associated with dehorning. You must have a valid VCPR in order to use prescription drugs.
 - □ True
 - □ False
 - □ I don't know
- 3. Use of prescription drugs to minimize pain results in meat withdrawal times.
 - □ True
 - □ False
 - □ I don't know
- 4. Removing horns/horn buds from calves should occur
 - □ After 6 weeks of age
 - □ Before 6 weeks of age
 - □ After 4 months of age
 - □ Never, the pain of removing them is not justified
 - I don't know
- 5. Sedation reduces the pain of dehorning.
 - □ True
 - □ False
 - □ I don't know
- 6. Injection of local anesthetic reduces the pain associated with dehorning.
 - □ True
 - □ False
 - □ I don't know
- 7. Providing relief from pain and inflammation following the dehorning
 - □ Is not necessary, calves will manage fine without pain relief
 - □ Is suggested to alleviate animal welfare concerns
 - □ Is suggested because it helps the calf to remain comfortable, eating and drinking normally
 - □ Is suggested because it helps alleviate additional stress to the calf's immune system
 - □ I don't know

- 8. The injection site to block the Cornual Nerve is located
 - □ At the base of the horn/bud
 - □ Near the outside aspect of the eye
 - □ Halfway between the outside aspect of the eye and the base of the horn/bud
 - □ Below the ridge formed by the frontal bone
 - □ I don't know
- 9. Clipping the hair around the base of the horn/hornbud is recommended because
 - □ Clipping allows visualization of the bud
 - □ Clipping reduces the amount of burnt hair and the amount of paste applied to hair
 - □ Clipping reduces hair which would otherwise mat and irritate the healing site
 - □ All of the above
 - □ I don't know
- 10. To help ensure the corium is completely cauterized, the resulting ring after using the hot iron should be what color?
 - □ Black
 - □ Silver
 - □ Copper (red)
 - □ Blue
 - □ I don't know
- 11. Caustic paste may be applied to horns of calves greater than 6 weeks of age.
 - □ True
 - □ False
 - □ I don't know
- 12. Pain does not need to be mitigated when using caustic paste.
 - □ True
 - □ False
 - □ I don't know



Disbudding/Dehorning Dairy Calves

Liz Binversie, MS, Agriculture Educator, UW-Extension Brown County Sandy Stuttgen, DVM, Agriculture Educator, UW-Extension Taylor County Amy Stanton, Ph.D., Dairy Cattle Wellbeing Specialist, UW-Extension/UW-Madison

Removing horns from dairy cattle is an important farm safety practice because it prevents injuries to people and cattle. Removal of the horn or horn bud is a painful procedure and can be minimized by disbudding/dehorning cattle at a young age with proper pain management. Ideally, disbudding/dehorning should occur prior to six weeks of age. After this age the horn bud attaches to the skull, and the procedure is much more invasive.

In terms of pain management, polled genetics is the best method because there is no pain associated with genetically preventing horns in animals.

Hot Iron Disbudding/Dehorning

Recommended by 6 weeks of age

Benefits

- Low risk of incomplete disbudding - Can be performed on calves up to 6 weeks of age - Weather and housing do not impact efficacy

Steps for Hot Iron Disbudding/Dehorning:

- 1. Properly restrain the calf's head using a halter or head restraint. Meanwhile, preheat the butane or electric calf dehorner. As the dehorner is preheating, keep it away from all flammable material.
- 2. Clip the hair around the base of the horn for best visualization of the horn bud.
- 3. Local anesthesia utilizing a cornual nerve block is highly recommended to reduce the acute pain and discomfort associated with hot iron disbudding. Reduce pain and discomfort by providing a nerve block of the cornual nerve on each side of the head. The cornual nerve is located half-way between the lateral aspect of the eye and the base of the horn just below the bony ridge formed by the frontal bone. Palpate the ridge between the eye and the horn. Slide a 20-22 gauge, 1/2" needle straight in under the ridge halfway between the eye and the horn, injecting 2% lidocaine subcutaneously. Older calves will need additional pain measures. Using lidocaine results in a 4-day meat withhold. To ensure proper placement and dosage, CONSULT VETERINARIAN through the context of the Veterinarian/Client/Patient Relationship (VCPR).



- 4. Non-steroidal anti-inflammatory drugs (NSAID) are recommended in addition to local anesthesia to reduce the inflammation and associated pain following disbudding/dehorning.
 - a. Meloxicam is an oral tablet available with a VETERINARY PRESCRIPTION. Meloxicam is given orally before, at, or after disbudding/dehorning to minimize pain. Using meloxicam orally results in a 21-day meat withhold. Meloxicam for use associated with pain is prescribed extra-labeled through the VCPR. CONSULT VETERINARIAN for proper dosage.

Risks

- Typically requires greater labor and restraint

- Smell of burnt hair

-Requires meat-withhold due to drug use

- b. Flunixin is an anti-inflammatory drug that helps alleviate pain by reducing the inflammation caused by disbudding/dehorning. This drug is given at time of disbudding/dehorning <u>IV ONLY and results in a 4-day meat withhold. DO NOT USE INTRAMUSCULARLY OR SUBCUTANEOUSLY.</u> CONSULT VETERINARIAN for proper dosage. Because withdrawal times have not been established in pre-ruminant calves, flunixin should not be given to veal calves.
- 5. When disbudding/dehorning calves with heat, use a device with a diameter just larger than the horn base, so as to cauterize the skin immediately surrounding the horn bud. Apply pressure and rotate back and forth until a copper-colored ring forms, approximately 5-20 seconds. Do not leave the dehorner in place for much longer, especially in young calves. There is little chance of regrowth when the cauterized skin is loose or movable when touched following the procedure. The horn bud or button will slough off in 4-6 weeks.

Caustic Paste

Recommended during the first 3 days of life

Benefits

Can be done at less than 3 days of age
 No strong odor during application

Risks - Potential damage to face and eyes of calves - Improper application and run off can cause incomplete disbudding, requiring dehorning at a later age

Steps for use of Caustic Paste:

- 1. Properly restrain the calf's head using a halter or head restraint.
- 2. Clip the hair around the base of the horn to expose horn bud.
- 3. Apply the paste with gloved hands. Do not apply if calves can get wet, as paste will run causing damage to the calf.
- 4. To prevent smearing the paste after application, cover each horn bud with duct tape, or vet wrap.



An example of proper head restraint

- 5. After applying paste, keep calves separated for at least 1 hour and out of the rain for at least 6 hours. Calves MUST be housed on their own. Calves housed with cows will transfer paste to the udder of the cow causing a burn. Calves housed in groups are more likely to transfer paste to other calves.
- 6. Non-steroidal anti-inflammatory drugs (NSAID): See Page 1, #4.

*All drugs mentioned in this factsheet require a veterinary prescription and should be done only in the context of a valid Veterinarian/Client/Patient Relationship (VCPR).

**Organic producers should consult certifying agency for the list of approved products for local anesthesia and pain management for dehorning/disbudding.

Special thanks are extended to UW-Extension Oconto County Agriculture Agent Sarah Lloyd-Mills, DVM and

UW-Extension Outagamie County Dairy & Livestock Agent Zen Miller for peer-review of this fact sheet.

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Dehorning Videos

Caustic paste dehorning: <u>http://bit.ly/pastedisbudding</u> Hot iron disbudding: <u>http://bit.ly/hotirondisbudding</u>

Notes:





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 - □ I don't know
- 4. Removing horns/horn buds from calves should occur
 - □ After 6 weeks of age
 - □ Before 6 weeks of age
 - □ After 4 months of age
 - □ Never, the pain of removing them is not justified
 - I don't know
- 5. Sedation reduces the pain of dehorning.
 - □ True
 - □ False
 - □ I don't know
- 6. Injection of local anesthetic reduces the pain associated with dehorning.
 - □ True
 - □ False
 - □ I don't know
- 7. Providing relief from pain and inflammation following the dehorning
 - □ Is not necessary, calves will manage fine without pain relief
 - □ Is suggested to alleviate animal welfare concerns
 - □ Is suggested because it helps the calf to remain comfortable, eating and drinking normally
 - □ Is suggested because it helps alleviate additional stress to the calf's immune system
 - □ I don't know

- 8. The injection site to block the Cornual Nerve is located
 - □ At the base of the horn/bud
 - □ Near the outside aspect of the eye
 - □ Halfway between the outside aspect of the eye and the base of the horn/bud
 - □ Below the ridge formed by the frontal bone
 - □ I don't know
- 9. Clipping the hair around the base of the horn/hornbud is recommended because
 - □ Clipping allows visualization of the bud
 - □ Clipping reduces the amount of burnt hair and the amount of paste applied to hair
 - □ Clipping reduces hair which would otherwise mat and irritate the healing site
 - □ All of the above
 - □ I don't know
- 10. To help ensure the corium is completely cauterized, the resulting ring after using the hot iron should be what color?
 - □ Black
 - □ Silver
 - □ Copper (red)
 - □ Blue
 - □ I don't know
- 11. Caustic paste may be applied to horns of calves greater than 6 weeks of age.
 - □ True
 - □ False
 - □ I don't know
- 12. Pain does not need to be mitigated when using caustic paste.
 - □ True
 - □ False
 - □ I don't know

After participating in this session, what disbudding/dehorning techniques do you intend to implement on your farm? *Check all that apply.*

- □ Obtain veterinary training, lidocaine nerve blocks
- □ Obtain veterinary training, pain medications
- □ Clip the hair from the bud/horn area before disbudding or dehorning
- □ Use paste to disbud young calves
- □ Use hot iron to disbud calves less than 6 weeks of age
- □ Other _____

Technology benefits to animal health

Heather Schlesser Associate Professor UW-Madison Division of Extension

Lyssa Seefeldt Agriculture Educator UW-Madison Division of Extension





Heather Schlesser Phone: 715-261-1230 x 2 Email: <u>heather.schlesser@wisc.edu</u> Web: <u>https://marathon.extension.wisc.edu/</u>

Heather Schlesser is an Associate Professor with UW-Extension and serves as the Agriculture Educator for Marathon County. Heather's programming has focused on dairy and beef reproduction, dairy calf and heifer raising, and farm profitability. Heather has served on the Well-being conference planning committee since 2013. Heather earned her PhD in Reproductive Physiology from the University of Illinois in Urbana- Champaign.





Lyssa Seefeldt Phone: 608-297-3141 Email: <u>lyssa.seefeldt@wisc.edu</u> Web: <u>https://marquette.extension.wisc.edu/</u>

Lyssa Seefeldt is the Marquette County Livestock Educator and serves as one of the Swine Program Team leaders. Lyssa is an experienced educator working in informal adult education, designing and delivering culturally relevant community-based educational programs primarily for farmers. She collaborates with community partners to develop researched-based educational programs. This partnership has been key to delivering relevant information to her clientelle. Lyssa has her Masters degree in Animal Sciences from South Dakota State University.



Technology benefits to animal health

Heather Schlesser UW-Madison Division of Extension 2019 Dairy Well-being Conference

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Learning Objectives

- Identify the benefits of technology on the farm
- Understand the pros and the cons of the technology

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Robotic Milking Machines



Robotic Milking Unit

Main advantages:

- Labor savings
- Reduced operational costs
- Higher milk yields
- Better herd health management
- Improved welfare



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Brushes



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Calf Auto Feeders

8











Automatic Feed Pushers



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Automatic Cattle Feeders

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Summary

- Enhance cattle comfort
- Decrease labor
- Increase efficiencies
- Cost associated with technology

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Wisconsin Dairy Well-Being Roadshow – 2019

Thank you for attending. Your feedback and input are important.



Topic/Speaker		Level of knowledge " <u>before</u> " attending this program				Level of knowledge " <u>after</u> " attending this program				<u>er</u> " n		
	Poor	Below AVG	Average	Above AVG	Excellent	Poor	Below AVG	Average	Above AVG	Excellent	What management practices do you expect to add or change as a result of what you learned today?	
Group Housing Dairy Calves Jennifer Van Os Assistant Professor and Extension Specialist - Animal Welfare Department of Dairy Science University of Wisconsin-Madison												
Understanding Normal Sandy Stuttgen, Extension Taylor County Elroy location: Alana Voss Extension Jueau/ Sauk Counties												
Dehorning Using Pain Mitigation Sandy Stuttgen Extension Taylor County Elroy location: Sarah Mills-Lloyd Extension Oconto County												
Technologies to Aid in Well-being Heather Schlesser Extension Marathon County Elroy location: Lyssa Seefeldt Extension Marguette County												

Please turn over to complete back side

After attending this conference, what is the primary "take home message" for you today?

Please share what could be improved for this conference:

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Weathering the Storm During Calving

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https://fyi.extension.wisc.edu/youthlivestock/



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https://fyi.extension.wisc.edu/smallfarms/



https://fyi.extension.wisc.edu/wisheepandgoat/



Grazing Resources & Research Division of Extension	Search 🔎	WI Swine Extension Division of Extension	Search 🔎
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Sols and Nutrient Management Establishment, Improvement, Monitoring Cover Crops and Avnual Forages Designing Grazing Systems Weed Management Establishment, Improvement, Monitoring Cover Crops and Avnual Forages Designing Grazing Systems Weed Management Ecology and Environment Economics and Decision Tools Educator Resources We teach, learn, lead and serve, connecting people with the University of Wisconsin, UW Forage Research and Extension		The University of Wisconsin-Extension Swine Team works with farmers, veterinarians, and other industry representatives to provide access to research-based swine information for Wisconsin farmers.	SWINE TEAM CONTACTS Lysia Seefeldt, Marquette County hysia seefeldtifereis uwer edu (600) 297-3141 Adam Hudy, Richland County edam Judy Resuwers.edu
Interested in Grazing Native Plants? Grazing Native Plants in Iowa is a recent publication from the Leopold Center for Sustainable Agriculture at Iowa	UWEX Team Forage Resources Wil Beef Information Center Wil Sheep & Goat Extension	March 6 webinar on dealing with a PRRS positive herd The UW-Extension Swine Team, in conjunction with Wisconsin Pork Association, hosted a webinar to provide details on dealing with a Porcine Reproductive and	(601) 647-6148 SUBSCRIBE

https://fyi.extension.wisc.edu/grazres/







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