

Which would you prefer, -30°F or constant rain and mud? It seems as though the U.S. coasts are experiencing both extremes, neither of which is great for animals. It is critical to pay attention to animal nutrition during challenging environmental conditions because malnutrition and undernutrition can start animals down a slippery slope into serious secondary illnesses. Feed plenty of good quality hay to help animals stay warm, add grain if needed for additional energy, keep water available at all times, and don't forget the minerals. Plenty of dry bedding will also insulate livestock against the cold ground and decrease energy loss.

*The Kidding Pen* is available in English and Spanish at [www.animalag.wsu.edu/newsletters](http://www.animalag.wsu.edu/newsletters). We welcome input from producers! Send your announcements, comments, suggestions, recipes and educational articles to:

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## SAVE THESE DATES!

- Various** Cheesemaking classes. See article.  
**Various** Goat AI clinics. See article.  
**Jan. 13** SWWDGA DHIA clinic, scale certification, and meeting, Rochester WA Middle School. Details at <https://swwdga.org/events.html>.  
**Feb. 24** NW OR Dairy Goat Assoc. Annual Conference, Clackamas, OR. Details TBA at [http://nwodga.org/annual\\_dairy\\_goat\\_conference.html](http://nwodga.org/annual_dairy_goat_conference.html).

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## THE LURE OF GOING ONLINE



[https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0/015/102381/Primefact-1533-Footrot-in-Sheep-and-Goats.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0/015/102381/Primefact-1533-Footrot-in-Sheep-and-Goats.pdf). Comprehensive article about foot rot.

[ftp://ftp3.us.freebsd.org/pub/misc/cd3wd/1004/\\_ag\\_415\\_Goat\\_Health\\_Handbook05\\_237\\_jf\\_en\\_101270\\_.pdf](ftp://ftp3.us.freebsd.org/pub/misc/cd3wd/1004/_ag_415_Goat_Health_Handbook05_237_jf_en_101270_.pdf). Out-of-print goat health handbook originally developed for international veterinary workers.

<https://attra.ncat.org/attra-pub/summaries/summary.php?pub=577>. ATTRA Grazing Planning Manual and Workbook.

<http://articles.extension.org/pages/19441/goat-reproduction-parturitionkidding>. Good to read before kidding season starts.

<https://attra.ncat.org/attra-pub/summaries/summary.php?pub=409>. Tips for Marketing Sheep and Goat Products: Meat.

## OPPORTUNITIES TO VOLUNTEER

The Oregon Meat Goat Producers association has several opportunities for members to volunteer and help OMGP continue and grow. If you are interested in either of these positions, please contact Harless Marcom at [oregonmeatgoat@yahoo.com](mailto:oregonmeatgoat@yahoo.com) or 503-784-9121.

*Newsletter Editor*. Like to write? Keeping the membership updated and informed is a great way to keep up with everything going on in the industry.

*Membership Chair*. This person maintains the membership database via a simple online system.

## GOAT SCRAPIE VIDEOS

Here are two videos showing signs of scrapie in a Nigerian Dwarf dairy goat. Her disease was confirmed at necropsy. She appeared healthy and normal other than the collapsing behavior she demonstrates in the video. That seems to be the most consistent sign of scrapie in goats: a change in behavior. The two short videos are available at [https://www.youtube.com/watch?v=T\\_PAP7t9beM](https://www.youtube.com/watch?v=T_PAP7t9beM) and [https://www.youtube.com/watch?v=CAg\\_yi9z-KM](https://www.youtube.com/watch?v=CAg_yi9z-KM).

## DAIRY GOAT LINEAR APPRAISAL

adapted from 'Seeing a dairy goat 'by the numbers' by Mark Baden, ADGA linear appraiser and breeder, May 17, 2015 at <https://adga.org/seeing-a-dairy-goat-by-the-numbers>. Used with permission.

ADGA's linear appraisal program evaluates individual type traits affecting structural and functional durability. This allows users of the program to take full advantage of the potential for genetic improvement through selective breeding. The program provides the framework for a uniform accurate record system that can be used in or by:

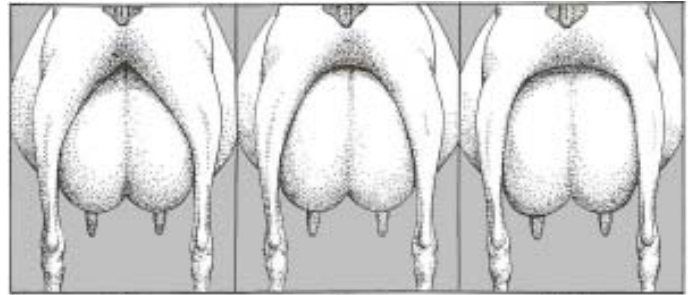
- Making farm management decisions
- Educational programs and research
- Genetic evaluation of does and sires
- Breed association(s)
- Promotion and sale of animals
- Visualizing animals "by the numbers"

The term "linear" means a scale is used to describe the range of each trait. Scales range from 0 to 50 for each trait. With the exception of stature and rump width, a linear trait score is an observation made by a trained appraiser rather than an actual measurement. Traits are evaluated by an appraiser without regard for an animal's age, stage of lactation, farm management, or environmental conditions. The biological traits used in a linear appraisal program are believed to have economic importance in terms of increased longevity (which reduces culling rate) or increased production. The traits exhibit enough variation to provide a basis for selection in breeding decisions and have enough genetic influence to be heritable, so progress can be made at an acceptable rate through sire selection. Generally, heritability of 0.15 or higher is accepted as indicating at least moderate trait heritability.

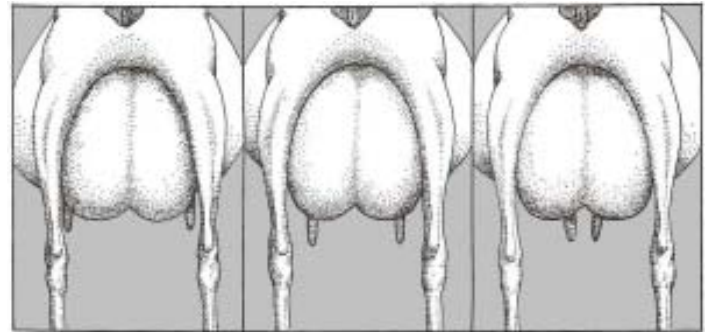
LINEAR TRAIT	HERITABILITY
Stature	0.52
Strength	0.29
Dairyiness	0.24
Rump Angle	0.32
Rump Width	0.27
Rear Leg Angulation	0.21
Fore Udder Attachment	0.25
Rear Udder Height	0.25
Rear Udder Arch	0.19
Medial Suspensory Ligament	0.33
Udder Depth	0.25
Teat Placement	0.36
Teat Diameter	0.38

It is possible to get a "mental picture" of an animal based entirely on its linear scores. Photographs may not provide the accurate, unbiased picture needed when selecting animals for breeding programs. The linear appraisal program does not set a certain point on a range of points on

the scale for a linear trait as "ideal," nor are more points, fewer points, or midpoint on the range for a trait necessarily more desirable. The program objectively assesses the condition of a trait that a sire passes on to his offspring. To provide an example of how this visualization might work, we will examine two udder traits: rear udder arch and teat placement. Rear udder arch is evaluated by the appraiser as the shape at the top of the rear udder where the milk is carried:



Teat placement is determined by observing where the center of the teat meets the udder floor:



In evaluating the linear scores of your own animals, or those in the pedigree of an animal you are considering as a herd sire, it is important to know the range of the trait, the heritability of the trait, the breed average for the trait, and the trait scores of the animals you are considering as possible genetic resources. Following the completion of all linear appraisal field sessions and data entry each year, ADGA publishes breed averages for each of the linear traits at <http://adgagenetics.org>. Any ADGA-registered doe or buck evaluated in 2005 or later can be found by searching the ADGA genetics web page. Linear history documents each appraisal and provides the scores for all the linear traits.

When looking at a buck's type evaluation (not his own linear history), we can see the average scores of his daughters and the reliability of his scores. Reliability is based on the number of daughters appraised, number of appraisals, number of different herds, and areas of the country where daughters were appraised. Data from bucks used extensively will have higher reliability than those that are younger or have seen more limited use.

Each of us has preferences regarding how we want our does to look. Prior to a linear appraisal session, each herd owner is provided with a document illustrating the range for each linear trait. Comparing your doe's scores with the illustrations will give you a better understanding of where that animal falls within the range. Being able to "visualize" an animal based on the linear trait scores provides us with an objective, unbiased tool.

The ability to visualize where we are and where we want to go in our breeding program with respect to the linear traits helps us make progress toward breeding a dairy goat that is sound and productive.

For more information about linear appraisal from ADGA, see the document at [https://adga.org/wp-content/uploads/2015/06/LA\\_BOOKLET.pdf](https://adga.org/wp-content/uploads/2015/06/LA_BOOKLET.pdf).

### WHAT'S COOKIN'?

*[Ed. note: this is a traditional Filipino recipe. Other variations can be found online by searching for "goat meat adobo." The use of ginger, onions, and vinegar is purported to reduce undesirable goat meat odors.]*

#### Adobong Kambing

by Vanjo Merano, from

<http://panlasangpinoy.com/2010/04/27/adobong-kambing-recipe>



1 lb chopped goat meat	¼ cup soy sauce
2 thumb-sized ginger pieces	¼ cup vinegar
8 cloves garlic, crushed	4 cups water
4 pieces dried bay leaves	3 Tbsp cooking oil
1 medium onion, sliced	5 pieces dried chilies
1 tsp crushed peppercorns	

Put 3 cups water in a cooking pot and add diced ginger, onion, and dash salt. Bring to boil. Add goat meat and simmer until meat is tender. Turn off heat, drain water. Separate meat from other ingredients and set aside. Pour cooking oil in a wok or frying pan and apply heat. When oil is hot enough, add garlic and fry until it turns light brown. Add cooked meat and pan fry until outer part turns light brown. Add soy sauce, 1 cup water, crushed peppercorns, and bay leaves; simmer for 10 minutes. Add vinegar and let boil. Simmer for 5 to 7 minutes. Add dried chilies (optional) and simmer until sauce becomes thick. Turn off heat and serve.

### UPCOMING CHEESE MAKING CLASSES

The WSU Creamery announces three upcoming cheese making classes. For more information and online registration please visit <http://creamery.wsu.edu/about-us/upcoming-events>.

If you require registration assistance, please contact Cathy Blood, [blood@wsu.edu](mailto:blood@wsu.edu) or 509-335-2845. If you have questions about content, please contact John Haugen, [jfhaugen@wsu.edu](mailto:jfhaugen@wsu.edu) or 509-335-5737.

#### Basic-Plus Cheese Making Short Course

Jan. 30 – Feb. 1, Mount Vernon, Washington.

This is a beginning cheese maker course that includes technical knowledge and hands on experience. This course is ideal for those considering cheese making as a business or hobby at the farmstead or artisan level.

#### 32<sup>nd</sup> Advanced Cheese Making Short Course

March 6-8, Pullman, Washington.

This short course is geared toward those making cheese in larger dairy plants. The technical knowledge gained and the hands on experience at the WSU Creamery will enhance understanding of the science of cheese making.

#### Pasteurization Workshop

April 10-12, Pullman, Washington.

This workshop gives pasteurizer operators and plant maintenance and regulatory personnel understanding of key principles and testing of critical pasteurization equipment.

### ON-FARM WELFARE PRODUCER EDUCATION PACKAGE NOW AVAILABLE

Ontario Goat (OG) is helping both new and experienced goat producers understand and improve the welfare of their herds to ensure animal wellbeing, profitability, and public trust for the sector through practical and innovative new resources. These resources are designed to ensure producers are fully equipped to maintain and improve on-farm animal welfare by bringing together information from a variety of sources and industry experts into easy-to-reference resources. The resources include:

Booklets: Goat welfare assessment; Prevention and detection of disease in kids; and Approved methods of euthanasia in goats.

Handouts and posters: Euthanasia decision tree; Assessing goat kid health; Dairy goat body condition scoring; and Shipping checklist.

Articles: Building a warming box; Disbudding kids; Practical goat husbandry: restraining and weighing goats; Does your dry off management ensure doe health and welfare?; Practical goat husbandry: treating your goats; Hoof health is the foundation of your herd; and Why assessing welfare is good for your farm.

A complete package of all sixteen resources can be purchased by non-members for \$70 + shipping by contacting the Ontario Goat office at 519-824-2942 or [info@livestockalliance.ca](mailto:info@livestockalliance.ca) or using the order form at <https://tinyurl.com/ycz2cc4b>.

## NEW PUBLICATIONS

The American Institute for Goat Research at Langston University just published a Dairy Goat Production Handbook. It is a detailed source of information for dairy goat producers. The book has over 460 pages of info on all aspects of dairy goat production. The Table of Contents and ordering info is available at [www.luresext.edu/sites/default/files/DGPHorderform\\_1stEdition\\_case\\_spiral.pdf](http://www.luresext.edu/sites/default/files/DGPHorderform_1stEdition_case_spiral.pdf).

The Institute has also published a second edition of their Meat Goat Production Handbook. The Table of Contents and ordering info is at <http://www.luresext.edu/sites/default/files/handbookorderform-1.pdf>.

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### GOAT AI CLINICS IN 2018

If you would like to learn how to artificially inseminate goats (and why wouldn't you? ☺), there are several opportunities coming up for you in 2018. The dates have yet to be confirmed for any of them, so contact the organizers to get on the list to receive more information about these clinics.

1. BIO-Genics LTD will conduct a goat AI clinic sometime in 2018 at the Lowell Fire District Conference Room, 389 N. Pioneer St., Lowell, OR. This will be a three-day class with extra hands-on experience. Class host will provide does and semen for attendees. Contact Richard Johnson at 541-554-0650 or [kiko@lookoutpointreach.com](mailto:kiko@lookoutpointreach.com).
2. BIO-Genics LTD will conduct another goat AI clinic sometime in 2018 at the 7N7 Ranch, 6473 Ferguson Rd. NE, Moses Lake, WA. Tiffany Dills at [tdills@outlook.com](mailto:tdills@outlook.com) will be the host and will provide all the does for this clinic.
3. Pat Hendrickson and the Southwest Washington Dairy Goat Association will conduct an AI clinic sometime in 2018, probably in SW WA. Pat is also available for private clinics by appointment. Contact her at [pat@rockyrun-farm.com](mailto:pat@rockyrun-farm.com). You can keep up-to-date on SWWDGA AI clinic details at <http://swwdga.org/aiclinic.html>.
4. Goat AI information/demonstrations/workshops are often available at the NW OR Dairy Goat Association's annual conference in Clackamas, OR. The conference agenda will be available at [http://nwodga.org/annual\\_dairy\\_goat\\_conference.html](http://nwodga.org/annual_dairy_goat_conference.html). Check for AI workshops if you are interested. This year's conference will be Feb. 24.

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### FSA FARM STORAGE FACILITY LOANS

The USDA Farm Service Agency's Farm Storage Facility Loan (FSFL) program provides low-interest financing to producers to build or upgrade storage facilities and purchase portable (new or used) structures, equipment, and storage and handling trucks. The low-interest funds can be used

to build or upgrade permanent facilities to store commodities. Eligible commodities relevant to goat producers include corn, oats, wheat, barley, pulse crops (lentils, chickpeas and dry peas), hay, milk, cheese, butter, yogurt, and meat. Qualified facilities include grain bins, hay barns, and cold storage facilities for eligible commodities.

Loans up to \$50,000 can be secured by a promissory note/security agreement and loans between \$50,000 and \$100,000 may require additional security. Loans exceeding \$100,000 require additional security. Producers do not need to demonstrate the lack of commercial credit availability to apply. The loans are designed to assist a diverse range of farming operations, including small and mid-sized businesses, new farmers, operations supplying local food and farmers' markets, non-traditional farm products, and underserved producers.

To learn more about the FSA Farm Storage Facility Loan, visit [www.fsa.usda.gov/pricesupport](http://www.fsa.usda.gov/pricesupport) or contact your local FSA county office.

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### PLEASE GET OUT THERE AND EDUCATE!

Once again "our friend" the Internet is sharing information that is well intended but harmful to animals. Have you seen the video at [https://m.youtube.com/watch?v=dCBmyCFpQ\\_o](https://m.youtube.com/watch?v=dCBmyCFpQ_o)? If you are a knowledgeable dairy goat owner, you should find what is being demonstrated and taught by that video very troubling.

The video purports to show how you can make and use a low-cost, fast, and easy dairy goat milking system. Unfortunately, people promoting and using this "system" do not understand goat mammary anatomy. This system milks under constant vacuum pressure without pulsation, which is harmful to teat structures, especially the teat sphincter. Extracting milk from the udder by constant vacuum will predispose a dairy animal to eversion of the streak canal lining and teat sphincter failure. A healthy teat sphincter is an animal's first line of defense against infectious organisms! Also, repeatedly inflamed mammary epithelial cells will not be able to produce the keratin that helps line and protect the streak canal between milkings.

If you wonder how a proper milking machine should work, consider a nursing kid: the kid does not suck milk out, but instead applies and releases negative pressure on the teat through the action of its tongue. When there is negative pressure in the baby's mouth, milk flows in; when there is positive pressure, the teat refills with milk from the storage cistern above. A healthy milking machine should mimic this behavior, not attempt to suck milk out under constant vacuum pressure.