

**For more information contact:**

Sandy Stuttgen, DVM  
Agriculture Educator  
UW-Extension Taylor County  
925 Donald St  
Medford, WI 54451  
Phone 715.748.3327 Ext 1  
sandy.stuttgen@ces.uwex.edu  
<http://taylor.uwex.edu>

**Contributing authors:**

David W. Kammel, Professor  
Biological Systems Engineering  
Department UW-Madison  
460 Henry Mall  
Madison, WI 53706  
Phone 608.262.9776  
dwkammel@wisc.edu

Tina Kohlman  
Dairy & Livestock Agent  
UW-Extension Fond du Lac &  
Sheboygan Counties  
Room 227 Administration/  
Extension Building  
400 University Drive  
Fond du Lac, WI 54935  
Phone 920.929.3180  
tina.kohlman@ces.uwex.edu  
<http://fonddulac.uwex.edu>

**References:**

D. Kammel, *University of Wisconsin-Madison, Midwest Plan Service's Dairy Freestall Housing and Equipment 8th Edition, Chapter 6: Housing for Transition and Special Needs Cows, 2013.*

K.L. Proudfoot, et al, *University of British Columbia, In Search of Privacy: Dairy cow preference for an Isolated Calving Area, J. Anim. Sci. Vol. 90, Supple. 3/J. Dairy Sci. Vol. 95, Suppl. 2*

The Dairyland Initiative  
University of Wisconsin -  
School of Veterinary Medicine,  
2015 Linden Dr.  
Madison, WI 53706  
On the Web at: [http://  
thedairylandinitiative.vetmed.  
wisc.edu/](http://thedairylandinitiative.vetmed.wisc.edu/)

# The Wisconsin Ideal Calving Pen

Sandy Stuttgen, DVM, Agriculture Educator, UW-Extension



For optimal newborn health, calves must be delivered into the cleanest, driest area possible, maintaining minimal pathogen exposure to the calf. This safe environment is provided when the calving animal is isolated from other cattle.

The Wisconsin Ideal Calving Pen provides space (less than eight hours) for a single calving cow. It is designed to be used on small or large dairy operations, regardless if the operation utilizes a traditional maternity pen, socially stable group environment or a just-in-time calving management program.

One-time, individual calving pens provide space for individual attention and observation of cows during calving. A well-planned calving pen makes it possible to provide proper handling, cow restraint and treatment while minimizing pathogen exposure to the newborn calf. The concept is a single-use pen concept, segregating a calving cow from the maternity area at the start of Stage II Labor.

## The Wisconsin Ideal Calving Pen Provides Biosecurity.

Keeping dairy calves alive and healthy starts with the right environment in the calving pen.

• Once newborn calves are born, they have continuous exposure with their environment, especially the floor of the

calving pen. Avoid dam-to-calf disease transfer through manure meals by providing a clean, dry calving environment. Bedding should be free from adult manure, urine and nasal secretions. The amount of bedding supplied should be enough to provide cushion, traction and to soak up urine and calving fluids. The ideal calving pen allows bedding to be easily added or removed with a skid steer after each calving.

• Immunosuppressed animals can be both the source of disease that will put other animals in jeopardy or may be the most susceptible animals to disease. To minimize the spread of disease, locate the calving pen(s) away from other animals, especially young calves and sick cows.

• Calving cows prefer isolation. Experience teaches cows on pasture isolate themselves during parturition. Recent work by K. L. Proudfoot, et al, at the University of British Columbia, Vancouver found when given a choice between an open bedded pack and one enclosed by solid walls, single-housed calving cows chose the enclosed area. We can create this secluded area by using tarps or other fabric (which can be taken down for cleaning) to create a curtained corner in our Ideal Calving Pen.

• The base of the pen can be concrete, clay or sand. Although concrete floors are more easily cleaned, they may not provide the best footing surface for the cow. Clay or sand bases allow better footing for the cow and relatively easy cleaning of the pen when accessed by a skid steer. Bedding should be cleaned out and replaced with fresh dry bedding after every calving.

## The Wisconsin Ideal Calving Pen Features:

**A minimum 12' x 12' sized pen created from portable gates.** Individual calving pens should be approximately 12 feet by 12 feet, or approximately 144 square feet.

- The Ideal Calving Pen is designed to be a single-use pen, which is easily cleaned after each calving by removing the gates.
- Gates allow funneling of the cow into the headlock for dystocia assistance, treatment and milking after calving. Gates are used to create a working chute, but can be swung away in case the animal goes down, or for access to either side of the cow (for example to perform a caesarian section).

**A quick release headlock for restraining cows.** The quick release headlock allows one worker to easily catch a cow for close examination or to assist in the calving process.

**A support structure to allow lifting the cow.** Provide at least one lifting ring centered over the pen capable of supporting a cow. An overhead structure is positioned so that if an animal goes down while in the headlock or in the pen, she can be lifted.

**An overhead vacuum line** connected to a floor milk collection bucket allows for cow-side colostrum harvest. Providing optimal passive transfer of immunity from the cow to her calf is achieved by timely clean administration

of sufficient volume high quality colostrum. Cattle quickly switch from colostrum to milk production at calving. Today's high producing cows quickly dilute their colostrum. Delaying the harvest of colostrum until the next time the cow can be milked through the parlor creates less than optimal colostrum quality.

**Access to water.** Having a source of both hot and cold water nearby allows for sanitary calving practices to be used. You may also position The Ideal Calving Pen to allow the cow access to the maternity area drinking water.

**Flexibility in placement.** The Wisconsin Ideal Calving Pen is placed in an area which provides excellent lighting for good observation and located in an area to minimize interruption of the calving process.

### In Summary:

Work with your county UW-Extension agent to determine how many calving pens are needed for your herd and where they should be placed in your maternity situation. Generally, one calving pen can handle a herd of 50-150 cows.

Regardless if a farm utilizes traditional, socially stable maternity groups or just-in-time calving, the health of the newborn calf is optimized by birth in the cleanest area possible away from other adult cattle. The Wisconsin Ideal Calving Pen creates the ideal environment to provide cow comfort, worker safety and minimize disease transfer from cow to calf.

### List of Features:

- Minimum size 12 x 12
- Headlock with ability to extract a down cow easily
- Optional walk through locking head gate
- Access to cow from all sides
- Personal pass access
- Support structure to allow lifting cow
- Vacuum line for harvesting colostrum
- Access by skid steer for cleaning

### Options:

- Share headlock or head gate with adjacent pen
- Pen access to drover lane or traffic lane
- Access to hot & cold water
- Cow access to drinking water

