This portion of the NAHMS Dairy ’07 survey consists of several assessments for calf growth, animal health, and cow comfort.

You will complete the following pages. The results of this data collection will be summarized in a Producer report that will provide a measure of health and comfort of the cow and may highlight aspects of the cows’ environment that can be modified to improve cow health and comfort. The calf growth assessment will provide a measure of preweaning nutrition and a comparison for calves of the same age can be made to industry recommendations.

This Animal Assessments Collection Record consists of the following:

**Heifer Calf Growth Assessment**
Up to 30 heifer calves will be measured using a calf weight / growth tape.

**Cow Comfort Assessment**
Questions regarding fresh cow housing areas and measurements will be recorded and assessed. Ideally complete approximately 2 hours prior to milking.

**Hygiene and Hock Scoring**
The hygiene of udder, legs, and flanks and the condition of hocks will be scored on a maximum of 100 cows.

**Do the Assessments in this order for biosecurity in the calf area.**
Dairy 2007 – Heifer Calf Growth Assessment

**NOTE: Do the Heifer Calf Blood Sampling while in the calf area to maintain biosecurity.**

Measure a maximum of 30 preweaned calves; 10 in each of the following age groups: 1-30 days 31-60 days 61 days to weaning

1) Record the Sample ID, Breed, and Birth Date on the form.
2) Using the weight tape, estimate and record the weight (pounds) and the heart girth (inches).
3) Using the weight tape, estimate the wither height (inches).
4) Score a maximum of 10 calves in each age category.

<table>
<thead>
<tr>
<th>Calf ID</th>
<th>Breed</th>
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<tr>
<td></td>
<td>1=Holstein, 2=Jersey 3=Guernsey, 4=Brown Swiss, 5=Other (specify)</td>
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<tr>
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<td>Birth Date (MM/DD/YY)</td>
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<td>Weight (From tape) (Pounds)</td>
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<td></td>
<td>Heart Girth (Inches)</td>
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<td>Wither Height (Inches)</td>
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Leave the weight tape with the Producer.

REST OF TABLES ON BACK OF THIS PAGE
You can graph these growth and weight data on the last page of this Assessment and leave with the Producer.
Dairy 2007 – Cow Comfort Assessment

Complete questionnaire for the housing area where the majority of fresh cows are housed.
Freestall/Drylot/Multiple-animal OR Tie Stall/Stanchion/Individual animal

**Freestall / Drylot / Multiple-animal pen**

This questionnaire refers to the building or area that houses the majority of FRESH cows. If unsure which pen to sample, assess the pen with the majority of milking cows.

This questionnaire should be completed between 2 hours after milking and 2 hours prior to the next milking.

*Please complete Questions 1-21 before disturbing the cows.*

1. What is the current time? ............................................................................................ _____AM PM
2. What is the current temperature (Fahrenheit) of the assessment area? ................... ________degrees
3. Which of the following best describes the building / area:  (Check one only.)
   □ 1 Freestall Barn  □ 2 Drylot  □ 3 Other multiple animal area (specify:_______________________)
4. In what year was the building / area constructed? ...................................................... ________year
5. Which of the following best describes the majority of cows in the pen being assessed?  (Check one only.)
   □ 1 Early Lactation (1-90 Days in Milk [DIM])  □ 4 All Lactation stages
   □ 2 Mid Lactation (90-180 DIM)  □ 5 Other (Specify_______________________)
   □ 3 Late Lactation (>180 DIM)
6. How many cows are currently housed in the pen or area being assessed? ............... ________cows
7. What is the maximum number of cows housed in this pen / area? .............................________cows
8. What is the average number of cows housed in this pen / area? ................................ ________cows
9. What time were these cows last milked? .................................................................... _____AM PM
10. What time will these cows be milked next? ................................................................. _____AM PM
11. What time were these cows last fed?.......................................................................... _____AM PM
12. What time will these cows be fed next? ...................................................................... _____AM PM
13. How frequently is new bedding added (days)?............................................................ every ________days
14. How many days ago was new bedding added?.......................................................... ________days ago
15. What percent of the feed bunk has feed that is easily accessible by cows?  (Check one only.)
   □ 1 Less than 5%  □ 2 5%-25%  □ 3 26-75%  □ 4 Greater than 75%
16. How many headlocks are in the pen?  ....................................................................... ________headlocks

*If Freestall barn, Skip to Question 18*

17. How many cows are currently lying in the pen? ......................................................... ________cows

*If Drylot or other pen without freestalls, Skip to Question 22*
A tally sheet is provided on the bottom of page 7 so the following 4 questions and Question 29 can be answered in a single pass of the pen.

18. How many cows are currently perching (front hooves touching stall) in a freestall? + _______ cows
19. How many cows are currently standing (all hooves touching stall) in a freestall? + _______ cows
20. How many cows are currently lying in a freestall? + _______ cows
21. The total number of cows currently contacting a freestall is (18+19+20)? = _______ cows
22. What is the total bunk space (in feet)? + _______ feet
23. What is the length of the pen (in feet)? (may be the same as Question 22) + _______ feet
24. What is the width of the pen (in feet)? + _______ feet
25. Which of the following best describes the stall / pen base (surface under the bedding) of the pen / stall where cows lie: (Check one only.)
   □ 1 Concrete
   □ 2 Dirt
   □ 3 Rubber mat
   □ 4 Mattress
   □ 5 Waterbed
   □ 6 Other (specify: _____________________)
26. What bedding is present in the stalls / pen today? (Check one only.)
   □ 1 Straw
   □ 2 Sawdust
   □ 3 Fine Sand
   □ 4 Coarse Sand
   □ 5 Composted manure
   □ 6 Dried manure
   □ 7 Shredded newspaper
   □ 8 Other (specify: _________________)
   □ 9 None
27. Which of the following best describes the bedding quantity / stall condition in the majority of stalls / pen?
   □ 1 Freestall / pen base not exposed, bedding level with curb
   □ 2 Freestall / pen base not exposed, but bedding slightly dished out
   □ 3 Freestall / pen base is exposed (less than 50% exposed)
   □ 4 Freestall / pen base is mostly exposed (more than 50% exposed)
   □ 5 No bedding present
   □ 6 Other (specify: _________________)
28. How many of the following types of water sources are available in the pen?
   a. Individual cow cups or bowls ................................................................. _______ #
   b. Water troughs or tanks ................................................................. _______#
   c. Other Specify_________________ ) ................................................................. _______ #

If building is not a freestall barn, Questionnaire completed!

29. How many freestalls are present in the pen? .................................................... _______ stalls

See the diagram outlining the freestall measurements on page 8

30. Measure the width of the curb (in inches)? .......................................................... _______ inches
31. Measure the height of the curb (in inches) from the alleyway surface? .................. _______ inches
32. Measure the width of the freestall (in inches) from the inside edge of the loops at the point closest to where the loops attach for 4 representative stalls:
   1._______ inches   2._______ inches   3._______ inches   4._______ inches
33. Is a neck rail present? ...................................................................................... □ 1 Yes  □ 3 No

If Question 33="NO", skip to Question 37

34. Is the neck rail stationary (i.e. firmly attached to the loops)? ............................. □ 1 Yes  □ 3 No
35. Measure the distance (in inches) from the back edge of the neck rail to the rear of the curb (in the center of the stall) for 4 representative stalls?
   1.________ inches   2.________ inches   3.________ inches   4.________ inches

36. Measure the distance (in inches) from the lower edge of the neck rail to the bedding surface (in the center of the stall) for 4 representative stalls?
   1.________ inches   2.________ inches   3.________ inches   4.________ inches

37. Is a brisket locator (board) present?..........................................................................
   □1 Yes □3 No

If Question 37='NO', skip to Question 41

38. What type of material is the brisket locator? (Check one only.)
   □1 Concrete                  □3 PVC pipe
   □2 Wood                     □4 Other (specify: ___________________________)

39. Measure the distance (in inches) from the back edge of the brisket locator to the rear of the curb for 4 representative stalls?
   1.________ inches   2.________ inches   3.________ inches   4.________ inches

40. What is the length (in inches) from rear of curb to front of lunge space (post, etc where the loops attach) for 4 representative stalls?
   1.________ inches   2.________ inches   3.________ inches   4.________ inches

41. Is there a barrier in the front of the stall that restricts lunge space? ......................... □1 Yes □3 No

If Question 41='NO', Questionnaire completed!

42. What type of barrier is present that restricts the front lunge space? (Check one only.)
   □1 Concrete                  □3 Cable
   □2 Wood                     □4 Other (specify: ___________________________)

End of Freestall /Drylot / Multiple-animal Pen Questionnaire

Freestall Tally Worksheet

<table>
<thead>
<tr>
<th>Perching Cows</th>
<th>Standing Cows</th>
<th>Lying Cows</th>
<th>Empty Stalls</th>
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</tr>
</tbody>
</table>

Total   Total  Total   Total
Freestall Measurement Diagram
(Numbers in Diagram refer to Question number)
Complete this questionnaire if the majority of FRESH cows are housed in a tie stall, stanchion, or in individual pens.

**Tie stall / Stanchion / Individual-animal pens**

This questionnaire refers to the building or area that houses the majority of FRESH cows. If all cows are housed in a single barn, use this assessment to evaluate the entire barn. If cows have access to pasture, complete the assessment while they are in the barn and make a note about pasture access. This questionnaire should be completed between 2 hours after milking and 2 hours prior to the next milking.

**Please attempt to complete questions 1-14 before disturbing the cows.**

1. What is the current time? ........................................................................................ _______AM   PM
2. What is the current temperature (Fahrenheit) of the assessment area? ................... ________degrees
3. Which of the following best describes the building / area: (Check one only.)
   - ☐ 1 Tie Stall Barn
   - ☐ 2 Stanchion Barn
   - ☐ 3 Individual-animal pens
   - ☐ 4 Other (specify: _____________________)
4. In what year was the building / area constructed? ..................................................... ________year
5. How many cows are currently housed in the building or area being assessed?......... ________cows
6. What time were these cows last milked? .................................................................... _______AM   PM
7. What time will these cows be milked next?................................................................. _______AM   PM
8. What time were these cows last fed?.......................................................................... _______AM   PM
9. What time will these cows be fed next? ...................................................................... _______AM   PM
10. How frequently is new bedding added (days)?............................................................ every ________days
11. How many days ago was new bedding added?.......................................................... ________days ago
12. What percent of the feed bunk has feed that is easily accessible by cows? (Check one only.)
   - ☐ 1 Less than 5%
   - ☐ 2 5%-25%
   - ☐ 3 26-75%
   - ☐ 4 Greater than 75%
13. How many cows are currently standing?..................................................................... ________cows
14. How many cows are currently lying down? ................................................................. ________cows
15. Which of the following best describes the stall base (surface under the bedding) of the pens / stalls where cows lie: (Check one only.)
   - ☐ 1 Concrete
   - ☐ 2 Dirt
   - ☐ 3 Rubber mat
   - ☐ 4 Mattress
   - ☐ 5 Waterbed
   - ☐ 6 Other (specify: _____________________)
16. What bedding is present in the stalls / pen today? (Check one only.)
   - ☐ 1 Straw
   - ☐ 2 Sawdust
   - ☐ 3 Fine Sand
   - ☐ 4 Coarse Sand
   - ☐ 5 Composted manure
   - ☐ 6 Dried manure
   - ☐ 7 Shredded newspaper
   - ☐ 8 Other (specify: _____________________)
   - ☐ 9 None
17. Which of the following best describes the bedding quantity / stall condition in the majority of stalls / pen?
   - □ 1. Stall / pen base not exposed, bedding level with curb
   - □ 2. Stall / pen base not exposed, but bedding slightly dished out
   - □ 3. Stall / pen base is exposed (less than 50% exposed)
   - □ 4. Stall / pen base is mostly exposed (more than 50% exposed)
   - □ 5. No bedding present
   - □ 6. Other (specify: _____________)

*If building is a tie stall or stanchion barn, skip to Question 19!*

18. What is the average bunk space (in inches)? .............................................................. _______ inches

19. Measure (on center) the width of 4 representative stalls / pens and record in inches:
   1. ______ inches  2. ______ inches  3. ______ inches  4. ______ inches

20. Measure the length of 4 representative stalls / pens and record in inches:
   1. ______ inches  2. ______ inches  3. ______ inches  4. ______ inches

*If an individual animal pen, questionnaire completed!*

21. Does this operation use gutter grates? □ 1 Yes □ 3 No
   If Yes, what percent of stalls have a gutter grate behind them? .............................. _______%

22. Does this operation use cow trainers? ................................................................. □ 1 Yes □ 3 No

*If Question 22='No', questionnaire completed!*

23. Measure the distance (in inches) from the stall edge of gutter to the point on the bed directly below the electric trainer for 4 representative stalls:
   1. ______ inches  2. ______ inches  3. ______ inches  4. ______ inches

24. Measure the distance (in inches) from the cow trainer to the bedding surface (in the center of the stall) for 4 representative stalls:
   1. ______ inches  2. ______ inches  3. ______ inches  4. ______ inches

*End of Tie Stall / Stanchion / Individual-animal Pen Questionnaire*
Dairy 2007 – Hygiene and Hock Scoring

Using the scoring tables on the back of this page, score the legs, udders, flank, and hocks of a maximum of 100 cows making a tick mark for each as you go through the pen.

✓ If less than 100 cows on dairy, score all cows
✓ Score 25% of larger herds up to a maximum of 100 cows within 3-4 pens.

Record the highest score for each cow. Example, if a cow scores a 2 on one side and a 3 on the other, record the 3.

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<th>Hygiene Scores</th>
<th>Hock Scores</th>
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<tr>
<td>Total</td>
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</tbody>
</table>

Hygiene scoring evaluates udder, legs and flank.
1 – Little or no manure present
2 – Minor amounts of manure present
3 – Moderate / large amounts of manure present

Hock scoring will hock area.
1 – No swelling or hair loss (no lesion)
2 – Hair loss, but no evidence of swelling (mild lesion)
3 – Swelling and /or ulceration (severe lesion)

Scoring Tables on back of this page
Complete this Total Score Table

<table>
<thead>
<tr>
<th>Pen:</th>
<th>SCORE</th>
<th>Hygiene Scores</th>
<th>Hock Scores</th>
<th>Pen:</th>
<th>SCORE</th>
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Heifer Calf Growth and Height Charts for Producer

Figure 1. Weight by Month of Age—U.S. Holsteins

Figure 2. Height by Month of Age—U.S. Holsteins

THIS PAGE SHOULD BE COMPLETED AND LEFT WITH THE PRODUCER
Adapted from Monitoring Dairy Heifer Growth Publication
Penn State University – College of Agricultural Sciences
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