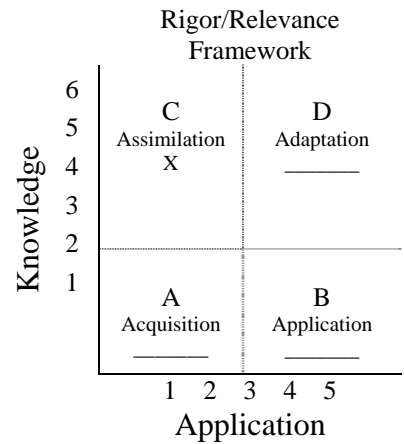


**Dairy Cattle Evaluation  
Frame  
Lesson 4**



Area and/or Course: Animal Science/Dairy

Teacher Goal(s):

1. Students to gain exposure to the components of the frame.
2. Students to understand why the frame is important in assessment of dairy cattle.
3. Student to have the ability to describe the frame with proper terminology.

**Lesson Title: Frame**

Objectives:

The student will be able to (TSWBT). (OR Skill Set numbers in parentheses at the end of the objective statement.)

1. Master the parts of the dairy cow. (AGPC 01.05.04.01)
2. Demonstrate understanding of frame in relation to dairy cattle evaluation. (AGPC 01.05.04.02)
3. Gain experience in terms related to frame to be used for oral reasons. (AGPC 01.05.04.04)

CIM/CAM Standard met by Objectives:

| <u>Page</u> | <u>Category</u> | <u>Subject</u> | <u>Common<br/>Curr. Goal</u> | <u>Benchmark<br/>&amp; Number</u> |
|-------------|-----------------|----------------|------------------------------|-----------------------------------|
| 1. E-20     | English         | Communication  | Tech. Speak                  | 10:1                              |
| 2. S-6      | Science         | Life Science   | Organisms                    | 8:1,4                             |
| 3. S-8      | Science         | Life Science   | Heredity                     | 8:1,2,3                           |

Materials, Equipment, Audio-visual aids:

1. Power Point
2. Quiz
3. Class handout
4. Parts of the cow quiz
5. Reasons notes handout

References:

1. Hoards Dairyman
2. American Jersey Cattle Club
3. Holstein Foundation
4. Oregon State University Dairy Cattle Evaluation Extension Publication
5. World Holstein Friesian Association

\*Quiz on dairy character\*

**Review Yesterday's Lesson:**

During our last lesson we talked about dairy character, why it is important in reference to evaluation of the animals as well as components that make up this trait. What are the 4 characteristics of dairy character?

1. Physical evidence of milking ability
  - a. General openness
  - b. Angularity and flatness of bone
  - c. Strength
  - d. Free from coarseness

What parts of the cow do we assess in order to determine the level of dairy character possessed?

1. Ribs
2. Thighs
3. Withers
4. Neck
5. Skin/hide

At this time we will be presenting the reasons you prepared on dairy character.

**Set:**

Today we will be going over the skeletal parts of the cow involved in frame. Who would like to make an educated guess as to what parts may be involved in the frame trait?

1. Rump
2. Stature
3. Front end
4. Back
5. Breed characteristics

These are all great answers.

**Summary:**

At the completion of the class today, you will be able to:

1. Describe the components of frame.
2. Understand why the frame is important in assessment of dairy cattle.
3. Describe the frame with proper terminology.

Subject Matter Outline/Problem and Solution  
(Application Points lace in throughout lesson) (Modeling,  
Guided Practice, and Content)

\*Parts of the cow\*

1. Frame
  - a. Skeletal parts of the cow excluding the feet and legs
    - i. Rump
    - ii. Stature
    - iii. Front end
    - iv. Back
    - v. Breed characteristics
2. Rump
  - a. Width between the pins
  - b. Tail head placed above and between pins
  - c. Tail head free from coarseness
3. Rump width trait picture
4. Rump
  - a. Pins placed slightly lower than hip bones
  - b. Wide thurls centrally placed between pin bones
5. Rump slope trait picture
6. Stature
  - a. Height and length of outline

Strategy – includes Teacher Activity,  
Student Activity, Questions/Answers  
and Objectives

**Students are taking notes.**

Remember to continue studying the parts of the cow.

The frame traits are fairly straight forward.

Q: Who can give me an example of a breed characteristic? We covered these back in our breeds lesson.

Q: Why would a wide rump be a desirable trait?

A: Calving ease

Q: Do you think the rump will widen with additional calvings?

A: Yes

*Picture on right is ideal.*

Pins that are even with or higher than the hips is considered undesirable.

*Picture on right is ideal.*

Measured at the withers

We want the cow to always to

|   |  |
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| <p>b. Height at withers and pin bone should be proportionate.</p> <p>7. Front End</p> <p>a. Front legs straight, wide apart, and squarely placed</p> <p>b. Shoulder blades and elbows firmly set against the chest wall</p> <p>c. Fullness in the crops</p> <p>8. Front End trait Picture.</p> <p>9. Back</p> <p>a. Straight and strong</p> <p>b. Strong loin and nearly level</p> <p>10. Picture of Connie</p> <p>11. Breed Characteristic</p> <p>a. Overall style and balance.</p> <p>b. Feminine head</p> <p>c. Clean-cut</p> <p>d. Slightly dished with broad muzzle</p> <p>e. Large open nostrils and strong jaw</p> | <p>appear as though she walks up-hill. Her withers being slightly higher than her hips.</p> <p>Last time we talked about dairy character. If a cow has too much dairyiness, she will be narrow in her front end and open in her crops.</p> <p>A cow who does not have elbows or shoulder blades set against the chest wall is said to be “wing shouldered”.</p> <p>Q: Where are the crops?</p> <p><i>Picture on the right is ideal.</i></p> <p>Straight with a gentle slope up from her pins to her chine.</p> <p>Notice how straight Connie is over her topline.</p> <p>We want the cow to blend form one part to the next. As we look at more cows, you will notice some are more eye appealing than others. Generally this is due to style.</p> <p>Bovine Hottness<br/> Bovine eye candy<br/> Bovine babe<br/> Bovine beauty<br/> Whatever you want to call it.</p> |
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| <p>12. Stature Terms</p> <ul style="list-style-type: none"> <li>a. Taller, more upstanding</li> <li>b. Taller at the point of withers</li> <li>c. More height at the point of withers</li> <li>d. More height of withers and prominence of chine</li> </ul> <p>13. Topline Terms</p> <ul style="list-style-type: none"> <li>a. Straighter down her topline; especially harder in the loin (chine)</li> <li>b. Stronger in the loin</li> <li>c. More nearly level from hips to pins</li> <li>d. “Harder down that topline; especially in the loin (chine)”</li> </ul> <p>14. Rump Terms</p> <ul style="list-style-type: none"> <li>a. More nearly level form hooks to pins; faulting 2 for being too low (high) in the pins</li> <li>b. Longer and leveler from hips to pins</li> <li>c. Wider in the pins (and thurls) noting....</li> </ul> <p>15. Rump Terms</p> <ul style="list-style-type: none"> <li>a. Tail head that sets more neatly between the pins</li> <li>b. Wider throughout the rump</li> <li>c. More correct slope from hips to pins; criticizing 3 for being too high (low) in....</li> <li>d. Faulting 2 for having a reverse tilt to the rump</li> </ul> | <p>Measured at the withers</p> <p>Looks at the entire outline.</p> <p>Remember we want a gentle slope from hips to pins.</p> <p>Levelness from hips to pins is a two-way trait. Meaning if you state in your reasons one animal has an advantage in correctness of rump, it is not know if the other cow is high or low in the pins.</p> <p>Two-way traits can be very useful for some feet and leg terminology as well.</p> |
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| <p>16. Front End Terms</p> <ul style="list-style-type: none"> <li>a. More width and strength of chest</li> <li>b. Smoother blending shoulder</li> <li>c. Tighter at the point of shoulder</li> <li>d. Fuller in the crops</li> </ul> <p>17. Front End Terms</p> <ul style="list-style-type: none"> <li>a. Blends more smoothly from neck to shoulder and shoulder to barrel</li> <li>b. More harmonious blending through the front end (throughout)</li> <li>c. Wider on the chest floor</li> </ul> <p>18. Head (Breed Characteristic) Terms</p> <ul style="list-style-type: none"> <li>a. More breed character about the head;</li> <li>b. More femininity about the head</li> <li>c. More alertness and style</li> <li>d. More style about the head</li> </ul> <p>19. Summary</p> <ul style="list-style-type: none"> <li>a. What are the 5 skeletal parts of the cow involved in frame?</li> </ul> <p>20. Reasons</p> <ul style="list-style-type: none"> <li>a. Aged Jersey Cows</li> <li>b. Listen for frame terms.</li> </ul> <p>21. Time to practice</p> <ul style="list-style-type: none"> <li>a. Place the following classes</li> <li>b. Take notes for reasons</li> </ul> | <p>Measured as width between the front legs.</p> <p>Q: Where are the two places in the front end we can look to determine if she is desirable?</p> <p>A: Crops and point of shoulder</p> <p>Q: What do we call a cow who is lose at the point of shoulder?</p> <p>A: Wing shouldered</p> <p>Q: Is there a breed characteristic about the head which is desirable in one breed and not another?</p> <p>A: Dished head-Jersey (desirable)</p> <ol style="list-style-type: none"> <li>1. Rump</li> <li>2. Stature</li> <li>3. Front end</li> <li>4. Back</li> <li>5. Breed characteristics</li> </ol> <p>Taking into account everything that we have covered thus far, place the animals. Remember, it is your job to tell me how they should be placed and explain why.</p> |
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## 22. Placing

- Brown Swiss
  - 4-1-2-3 with cuts of 3-5-2
- Guernsey
  - 3-4-1-2 with cuts of 4-1-4
- Holstein
  - 3-4-1-2 with cuts of 2-5-1

Reasons (click on speaker to listen)

- Brown Swiss
- Guernsey
- Holstein

Your ability to convince me you are correct will largely dictate your score.

Have your reasons ready for next time we meet.

Click on the speaker to hear reasons on the class. You will find the scores for various placings in the back of the Instructor Manual under “Contest #1”.

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Closure: Summary or Conclusion

(Go back through the pictures for a review of identification)

Frame is an important part of evaluation. Make sure to not forget about rump and front-end as being part of frame.

Next time we meet, you will receive a quiz over the material we covered today-frame.

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Evaluation: (Authentic Forms of Evaluation, Quizzes, Written Exam – something you grade).

| <u>Item</u>          | <u>Obj. Number</u> |
|----------------------|--------------------|
| 1. Complete the quiz | 1-3                |

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Assignments: (Student Activities involved in lesson/designed to meet objectives but not graded).

| <u>Item</u>             | <u>Obj. Number</u> |
|-------------------------|--------------------|
| 1. Complete the handout | 1-3                |

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Attachments:

1. Quiz
2. Class handout
3. Power Point
4. Reasons notes page