Dairy 1

Cowabunga!

Dairy Project Youth Activity Guide

Name______________________________

County____________________________
Note to Parents and Project Helper

Congratulations! A young person has asked you to be his/her dairy project helper. You are in a great position to help youth develop in positive ways as they learn about the dairy project and themselves. You can nurture and cultivate their interest in this project by guiding their planning, helping them carry out their projects and recognizing them for a job well done.

Youth can’t do this project without you! You can help young people get the most out of their experience through your enthusiasm and your ability to ask thought-provoking questions. With your help, youth can set goals, identify resources, practice presentations and evaluate their own progress as they complete the Dairy Achievement Program.

Youth Learner Outcomes

- Become knowledgeable and responsible animal caregivers
- Develop experience-based science skill sets that pertain to health and disease
- Appreciate the variety of opportunities available in animal and dairy careers
- Recognize and practice the skills and abilities necessary for success in animal-related careers
- Practice the life skills of communication, acquiring and evaluating data, decision making, planning and organizing, character development and more

Your Role

- Become familiar with the material in this guide and the Dairy Helper’s Guide
- Support youth in their efforts to set goals and complete each Achievement Program
- Discuss, date and initial the activities of the Dairy Achievement Programs as youth complete them
- Help youth to know themselves, including their strengths and weaknesses
- Encourage the use of the experiential learning model described on this page

The Dairy “Skills for Life” Series

Cowabunga! is the first in the series of three activity guides for youth that also includes Dairy 2, Moving Ahead, Dairy 3, Rising to the Top and the Dairy Helper’s Guide. The guides are developmentally appropriate for grades 3–5, 6–8 and 9–12 respectively, but may be used by youth in any grade based on their project skills and experience.

All activities include a description of the skills to be practiced, discussion questions, suggestions for additional activities and other helpful information. The Success Indicator listed for each activity is an excellent way to evaluate the youth’s progress. Each of the guides includes an Achievement Program to encourage youth to learn more about dairy cattle while developing important life skills. Before and After – “What Do You Know?” is a quick and fun way for youth to assess their knowledge BEFORE and AFTER they complete the activities. In the Helper’s Guide you will find another evaluation piece titled “Evaluating the Impact.” Use this before beginning each level and after the youth have completed each level.

Each activity gives youth an opportunity to LEARN BY DOING before being told or shown how. Your challenge is to stay in the background while the youth explores and learns from the experience. You can help best by listening as youth consider the questions and offer their answers.

Dairy Helper’s Guide

The Dairy Helper’s Guide contains more learn-by-doing activities that can be adapted for families, 4-H clubs, classrooms, after-school activities, child care settings, 4-H groups, other youth groups or camps. You will also find information about characteristics of youth, life skill development, teaching experientially, meeting ideas and answers to many of the activities in the youth guides.

Experiential Learning Model

This five-step model is used in each activity in this series.

1. Experience the activity. Perform, do it.
2. Share the results, reactions, observations (SHARE).
3. Problem by focusing. Track the experience, analyze the impact.
4. Generalize to connect the experience to real-world examples.
5. Apply what they have learned to a similar or different situation, practice.

Youth share how they will use the project and the skills practiced in other parts of their lives.

Youth describe the experience and their reactions.

Youth discuss what was most important about what they did.


As you can see, youth first attempt the activity on their own. After they do as much of the activity as they can, you then meet together and discuss: What did they do? What was important? How does what they did relate to their lives? How might they use these life and project skills in the future? Your ability to ask thought-provoking questions and listen to the youth’s ideas will add to the educational impact of the experience.

Good luck in your role as Project Helper and thanks for contributing to the positive development of youth!

Acknowledgments

2005 Revision Team: Carrie Chickering-Sears, Coordinator, MA; Julie Settle, NY; Martha Edwards Manning, VT; Susan Kerr, WA; Mark Nelson, UT; Clark Israelson, UT; Donna Durbin, KY; Carol Ward, NJ; Alan Smith, Liaison and Editor, Washington D.C.; Julie Settle, Word Processing, NY; Tom Zacher, Editor, MI.
Design and Production: Northern Design Group, MN
Previous Design Team Members: Mike Deziel, Coordinator, WA; Richard Pursley, MI; Arlin Holfen, WA; Tracy Behrken, NE; Mike Paters, MI; Tom Zacher, Liaison and Editor, HI; Ron Orth, IA; Cheryl Schwenke, WI; James Aarshel, WI; Tracy Behrken, NE; Lee Feeth, MN; Tony Ricker, MO; Jan Sweers, MI; Marcie Weeta, VN.

Copyright 2005 National 4-H Council. All rights reserved. Reproduction without permission of National 4-H Council is strictly prohibited.
For more on dairy cattle, look for these other guides in the 4-H Dairy Cattle Series.

Deborah Crothers, editor

Cowabunga!

Bucket of Contents

Note to Parents and Project Helper . . . . . . . . . . . . Inside Front Cover

Bucket of Contents ............................................................................. 1

Welcome to Cowabunga! .................................................................... 2

Cowabunga! Project Goals and Highlights ........................................ 3

Cowabunga! Achievement Program ...................................................... 4

Cowabunga! Completion Certificate ...................................................... 5

Chapter 1 Selection and Judging

Black & White & Red All Over ................................................................. 6

Selecting a Project Animal .................................................................. 8

From Head to Tail ................................................................................. 10

You Be the Judge ................................................................................ 12

Chapter 2 Udder Things

How Much Does a Calf Eat? ................................................................. 14

From Moo to U .................................................................................... 16

Chapter 3 Fitting and Showing

Getting Ready to Show ........................................................................ 18

Fitting for Show .................................................................................. 20

Showing Your Project Animal ............................................................... 22

Chapter 4 Management and Records

Dollars for Dairy .................................................................................. 24

Circle of Life ....................................................................................... 26

From Bottle to Bunk ............................................................................. 28

Cow Tally .............................................................................................. 30

Truth, Justice and the American Whey .................................................. 32

Dairy Talk 1 (Glossary) ....................................................................... 34

Dairy Cattle Resources ........................................................................ 36
Welcome to Cowabunga!

Are you ready to learn about dairy cattle and the dairy industry?

Through the activities in this guide, you will have many interesting and exciting challenges. You’ll learn about dairy parts, breeds, cost of raising cattle, how to care for your dairy animals and much, much more. If you don’t already have dairy cattle, the activities still help you learn. Each activity asks you to do something. Don’t be afraid to jump right in, and don’t give up if the activity doesn’t work out the first time. You’re still learning, right? The most important thing is to try. After you try, share what happened with your helper.

Start at the beginning of this dairy activity guide to learn about how to select and care for your calf. Once you have your calf, continue working in the dairy activity guide to discover why it’s important to keep records, what things you need to do to keep your calf healthy and what to practice with your calf before going to the fair.

Taking your calf to the fair each year will be one way you can share your experience and knowledge with other people. Whatever you decide to do, have fun doing these activities and enjoying your calf!

Learning about dairy isn’t all you will be doing. You’ll also be learning about yourself, too. Many of the things you’ll learn are skills you’ll use in other areas of your life such as decision making, communicating with others and being an effective leader.

What You’ll Do

You’ll find activities to help you develop your judging skills. Here are some of the things you’ll do:

- Learn the breeds of dairy cattle
- Select a project animal
- Explore the milk production system
- Demonstrate how to groom a dairy heifer
- Demonstrate dairy showmanship techniques
- Explain the difference between a calf and cow digestive tracts
- Learn about dairy information on the website

Cowabunga! Project Guidelines

- Set your goals and record project highlights.
- Do a minimum of seven activities in Level 1 each year and complete the Dairy Achievement Program within three years.
- Complete the Before and After – “What Do You Know?” evaluation.
- Practice and develop the life skills of relating to others, making decisions, learning to learn and communicating with others.
- Increase your dairy knowledge and skills.

Cowabunga! Achievement Program

While you are having fun doing the activities, you’ll also be completing Level 1 of the Dairy Achievement Program. There are three levels of this program. One is included in each of the dairy project activity guides. This program will help you set goals, record your successes and be recognized for your good work.

Your Project Helper

This person may be a parent, dairy breeder, project leader or advisor, a neighbor or an older friend who knows about dairy. The choice is yours. As you do the activities, you’ll discuss with your helper what you did and the questions in the Ruminations part of each activity. Sometimes your helper will need to work with you to identify resources, including people, organizations, events, magazines and books necessary to complete an activity. Once you have successfully completed each activity, your helper will date and initial your achievement program.

My Project Helper: ________________________

Phone number: ________________________

Why I chose this person: ________________________

Good luck with Dairy 1—Cowabunga!
Cowabunga! Project Goals and Highlights

Project Goals

Name ____________________________

My Animal’s Name ________________________________

Breed ____________________________

What I want to do and learn in Dairy 1.
1. _______________________________________________________
   _______________________________________________________
   _______________________________________________________
2. _______________________________________________________
   _______________________________________________________
3. _______________________________________________________

Project Highlights

Date and list the exciting things you do and learn.
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

“What Do You Know?” Before and After – Dairy 1

Here’s an easy way to tell if you learned something new and developed important project skills. Before you do the activities in this guide, indicate what you know then when you do the activities indicate what you know AFTER you complete them. You may be surprised how much you learned! Share the results with your helper.

Begin each skill with the words – I know how to ________
Then circle 1 (not at all); 2 (somewhat) or 3 (a lot).

<table>
<thead>
<tr>
<th>I know how to…</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify six breeds of dairy cattle and their characteristics</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Examine and select a project animal</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify 30 parts of a dairy cow</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify desirable and undesirable traits of dairy cattle</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Compare dairy animal feed intake to recommended amounts</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Describe the steps in the milk production system</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify supplies for showing dairy cattle</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Demonstrate dairy grooming techniques</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Demonstrate dairy showmanship techniques</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Make a budget of calf costs and family costs</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Describe basic needs of cattle throughout their life cycle</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Explain differences between a calf and cow’s digestive tracts</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Complete a dairy record for a calf</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Locate dairy information on the Internet</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

Place a photo of yourself with your project animal in this space.
## Achievement Program Guidelines

- Complete at least 21 of the Cowabunga! and Milking It for More activities within three years to complete the Cowabunga! achievement program.
- Have your project helper date and initial the activities as you complete them and discuss them with your helper.

### Cowabunga! Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Date Completed</th>
<th>Helper’s Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1 Selection and Judging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black and White and Red All Over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selecting a Project Animal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Head to Tail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You Be the Judge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 2 Udder Things</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How Much Does a Calf Eat?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Moo to U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 3 Fitting and Showing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting Ready to Show</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fitting for Show</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Showing Your Project Animal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 4 Management and Records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dollars for Dairy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circle of Life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Bottle to Bunk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cow Tally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truth, Justice and the American Whey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select and do any of the Milking It for More activities in Cowabunga! or make up your own. Record the page and number of each one you complete and have your helper initial it.

<table>
<thead>
<tr>
<th>Page</th>
<th>#</th>
<th>Date Completed</th>
<th>Helper’s Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write your own activity here.

Date: ________  Helper’s Initials: ________

Write your own activity here.

Date: ________  Helper’s Initials: ________

Write your own activity here.

Date: ________  Helper’s Initials: ________
Cowabunga!

Completion Certificate

I certify that

__________________________

has completed all requirements of the

Cowabunga! Achievement Program of the

4-H “Skills for Life” Dairy Series.

________________________________________

Helper’s Signature

__________________________

Date
There are six different breeds of dairy cattle throughout the United States. Each have distinct differences, such as color, size, origin, temperament and production. When selecting a calf or cow for a dairy project, you may be given a choice of breeds. Therefore, it is important for you to check the differences among the breeds.

Taking On the Challenge

Identify the breeds in the space provided. Now complete the Dairy Breed Summary. You may need to use each breed’s web site or contact the organization of each breed for additional information. Some information is provided in Fresh Facts to assist you.

**Dairy Team Summary**

<table>
<thead>
<tr>
<th>Breed</th>
<th>Mature Weight (lb.)</th>
<th>Avg. Lb. Milk (305 days)</th>
<th>Avg. Lb. Fat (305 days)</th>
<th>Avg. % Fat Test</th>
<th>Avg. % Protein Test</th>
<th>Country of Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayrshire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown Swiss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guernsey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holstein</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jersey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milking Shorthorn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ruminations

Discuss these questions with your helper.

Say Cheese! (Share)
- What are the different breeds of dairy cattle?
- What breed did you know the least about?
- What did you learn about this breed?
- What breed do you like best? Why?

Chew Your Cud (Process)
- Why is making decisions an important life skill?

Chore Time (Generalize)
- Why is it important for you to know the different breeds of dairy cattle?
- What decisions do you have to make about your animals?

Mooving Along (Apply)
- How would you make a decision about which breed to raise?
- How can you become a better decision maker?

Resources
Request a Pedigree Power workbook from the Holstein Association (see address in Dairy Resources) to help you learn how to evaluate pedigrees.

Activity written by Richard J. Grant and Jeffrey F. Keown and revised by Carrie Chickering-Soars.
Selecting a Dairy Project Animal

Choosing a good animal is an important part of the dairy business. It is important to select an animal that will grow into a high-producing cow and remain in the herd for a number of years. Good looks count, but think of other things, too. In this activity you will examine a calf and use information to help you make a sound choice.

Taking On the Challenge
Get together with a friend or your helper and examine an animal. Write your examination notes on Chart A. With this information and knowledge, use Chart B to help you select a dairy animal in the next activity.

A. Dairy Animal Examination Chart

<table>
<thead>
<tr>
<th>Calf Identification</th>
<th>Breed:</th>
<th>Age:</th>
<th>Height:</th>
<th>Weight:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body temperature</td>
<td>Housing:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General State of Health (circle one):</td>
<td>Excellent</td>
<td>Good</td>
<td>Poor</td>
<td></td>
</tr>
</tbody>
</table>

Describe how the calf looks and acts

Have these management practices been done? | Yes | No | Comments |
--- | --- | --- | --- |
Animal properly identified
Pedigree available
Production records available
Dehorned
Extra tests removed
Dewormed recently
Free from Ringworm
Free from parasites (external & internal)
Free from Pinkeye
Brucellosis vaccination (4 to 8 months)
IBR, BVD, PI3, Pastuercella vaccination
Blackleg, Redwater, Enterotoxemia, Leptospirosis vaccination

B. Signs of a Healthy Animal | Signs of a Sick Animal | Animal Being Considered
--- | --- | ---
Skin, hair and hooves Smooth and glossy Rough or dry
Nose and mouth Some moisture Runny, red or dry
Respiration rate 20–40/minute Over 50/minute
Eyes Clear and bright Sunken, dull
Rectal temperature 101.5–102.5 Above or below normal
Fecal material (adult) Not loose or off color Of color, dry and hard or runny
Fecal material (calf) Firm, sticky, yellow color Runny to liquid
Ears Up and alert Droopy
Appetite Wants to eat Picks at its feed
Say Cheese! (Share)

- What did you find when you examined the animal?
- Which animal did you select?

Chew Your Cud (Process)

- What information did you think was most important in making your decision? Why?
- Why do you need to examine an animal before you buy it?

Chore Time (Generalize)

- Why should you gather and compare information before making a decision?
- What big decisions have you had to make?

Mooving Along (Apply)

- How can you use what you learned to select an animal?
- How could you share what you learned with others?

Resources

Request a Pedigree Power workbook from the Holstein Association (see address in Dairy Resources) to help you learn how to evaluate pedigrees.

Acknowledgement: Adapted by Arlin Holtan from original activity "More Than Skin Deep" and activity revised by Clark E. Israelson.
As you learn more about dairy cattle, you'll want to know the names of their body parts. Many of the body parts affect how much milk a cow produces and how long she will stay in the herd. As you select a project animal and learn about judging and showing dairy cattle it is important to know the names of the body parts.

**Body Parts Word Bank**

1. Poll
2. Forehead
3. Bridge of Nose
4. Muzzle
5. Jaw
6. Throat
7. Point of Shoulder
8. Dewlap
9. Briaket
10. Point of Elbow
11. Knee
12. Sole
13. Heel
14. Chest Floor
15. Milk Wells
16. Milk Veins
17. Fore Udder Attachment
18. Teats
19. Fore Udder
20. Flank
21. Hoof
22. Pastern
23. Dewclaw
24. Switch
25. Hock
26. Rear Udder
27. Stifle
28. Rear Udder Attachment
29. Thigh
30. Tail
31. Pin Bones
32. Tailhead
33. Thurl
34. Rump
35. Hip
36. Ribs
37. Barrel
38. Loin
39. Back
40. Chine
41. Crops
42. Withers
43. Heart Girth
44. Neck

**Talk Words**

- Frame
- Stature
- Dairy character
- Body capacity
- Udder depth
- Teat placement
- Udder cleft
- Freemartin

**Dairy Project Skill:** Identifying cow body parts  
**Life Skill:** Acquiring and evaluating information  
**Success Indicator:** Identifies 30 parts of a dairy cow.  
**Educational Standard:** NG.K—4.3 Understanding of the characteristics of organisms.

**Taking On the Challenge**

From the Body Parts Word Bank, place the correct number of the part in the box pointing to that part in the picture. Start with the shaded boxes. As you learn more about dairy cattle you will be able to correctly identify all the major parts. Just for fun see if you can find the bold body parts in the Body Parts Word Find. Ask your project helper if you need assistance or go to the project website for more information.
Ruminations

Say Cheese! (Share)
- What parts of the dairy cow were you able to identify?
- With which parts of the dairy cow did you need assistance?

Chew Your Cud (Process)
- Why should you learn the parts of a dairy animal?
- What resources can help you learn about dairy cattle parts?

Chore Time (Generalize)
- What parts are similar on you and on a dairy cow?
- What is your favorite way to learn new things?

Mooving Along (Apply)
- When you are buying something, how would you gather information about it?
- Describe how you could help others learn about body parts.

Milking It for More

1. If a real cow is available, identify 25 parts to a group of friends. Describe what you believe is the most desirable shape of each.
2. Visit a dairy cattle show and listen to how the judge uses the correct names for the body parts when they give their reasons at the end of the class. Make a list of any words you do not know and ask your project helper to explain them to you.

Activity written by Tracy J. Behnken and revised by Martha Edwards Manning.

---

Dairy Cow Unified Score Card

There are five major classification traits on which a classifier bases a cow's score. Each trait is broken down into body parts to be looked at and ranked in order of importance.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Points for perfect score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame (skeletal parts except feet and legs)</td>
<td>15</td>
</tr>
<tr>
<td>- Rump - long and wide throughout with pin bones slightly lower than hip bones. Thrus need to be wide apart and centrally placed between hip bones and pin bones. The tailhead is set slightly above and neatly between pin bones, and the tail is free from coarseness. The vulva is nearly vertical.</td>
<td></td>
</tr>
<tr>
<td>- Stature - height, including length in the leg bones. A long bone pattern throughout the body structure is desirable. Height at the withers and hips should be relatively proportionate.</td>
<td></td>
</tr>
<tr>
<td>- Front End - adequate constitution with front legs straight, wide apart and squarely placed. Shoulder blades and elbows need to be firmly set against the chest wall. The legs should have adequate fullness.</td>
<td></td>
</tr>
<tr>
<td>- Back - straight and strong; the loin, broad, strong and nearly level.</td>
<td></td>
</tr>
<tr>
<td>- Breed Characteristics - overall size and balance. Head should be feminine, clean-cut, slightly dished with broad muzzle, large open nostrils and a strong jaw is desirable.</td>
<td></td>
</tr>
<tr>
<td>Dairy Character (physical proof of milking ability)</td>
<td>20</td>
</tr>
<tr>
<td>- Ribs - wide apart. Rib bones are wide, flat, deep, and slanted toward the rear.</td>
<td></td>
</tr>
<tr>
<td>- Thighs - lean, incurving to flat, and wide apart from the rear.</td>
<td></td>
</tr>
<tr>
<td>- Withers - sha.p, with the chine prominent.</td>
<td></td>
</tr>
<tr>
<td>- Neck - long, lean, and blending smoothly into the shoulders. A clean-cut throat, overlapt, and brisket are desirable.</td>
<td></td>
</tr>
<tr>
<td>- Skin - thin, loose, and pliable.</td>
<td></td>
</tr>
<tr>
<td>Body Capacity (volume measurement of the animal's capacity; length x depth x width)</td>
<td>10</td>
</tr>
<tr>
<td>- Barrel - long, deep, and wide. Depth and spring of rib increase toward the rear with a deep flank.</td>
<td></td>
</tr>
<tr>
<td>- Chest - deep and wide floor with well sprung fore ribs blending into the shoulders.</td>
<td></td>
</tr>
<tr>
<td>Feet and Legs (feet and legs)</td>
<td>15</td>
</tr>
<tr>
<td>- Feet - steep angle and deep heel with short, well-rounded closed toes.</td>
<td></td>
</tr>
<tr>
<td>- Rear Legs - (rearview) straight, wide apart with feet squarely placed. (side view) a moderate set (angle) to the hock.</td>
<td></td>
</tr>
<tr>
<td>- Hocks - cleanly molded, free from coarseness and puffiness with adequate flexibility.</td>
<td></td>
</tr>
<tr>
<td>- Pasterns - short and strong with some flexibility.</td>
<td></td>
</tr>
<tr>
<td>Udder (udder traits with some consideration on milk production)</td>
<td>40</td>
</tr>
<tr>
<td>- Udder Depth - moderate depth relative to the hock with adequate capacity and clearance.</td>
<td></td>
</tr>
<tr>
<td>- Teat Placement - squarely placed under each quarter, plumb and properly spaced from side and rear views.</td>
<td></td>
</tr>
<tr>
<td>- Rear Udder - wide and high, firmly attached with uniform width from top to bottom and slightly rounded to udder floor.</td>
<td></td>
</tr>
<tr>
<td>- Udder Cleft - evidence of strong suspensory ligament indicated by adequately defined haling.</td>
<td></td>
</tr>
<tr>
<td>- Fore Udder - firmly attached with moderate length and ample capacity.</td>
<td></td>
</tr>
<tr>
<td>- Teats - cylindrical shape and uniform size with medium length and diameter.</td>
<td></td>
</tr>
<tr>
<td>- Udder Balance and Texture - should exhibit an udder floor that is level as viewed from the side. Quarters should be evenly balanced; soft, pliable and well collapsed after milking.</td>
<td></td>
</tr>
</tbody>
</table>

Total possible points for perfect score 100