

Lesson 3: Principles of Dairy Cattle Selection

Name _____

Linear Evaluation**Objective:** Use linear evaluation to evaluate cows.

Looking at the linear traits described below, evaluate the cows by looking at the scores they have received for the seventeen traits. Describe the problems with each cow that could be selected for improvement. The cow's scores for a particular trait should be within five points of the ideal score.

Linear Traits

*most desirable score

Stature (ST)	1-5 Extremely short 25 Intermediate 45-50 Extremely tall*
Strength (SR)	1-5 Extremely narrow and frail 25 Intermediate 45-50 Extremely strong and wide*
Body Depth (BD)	1-5 Extremely shallow body 25 Intermediate 45-50 Extremely deep body*
Dairy Form (DF)	1-5 Extremely tight 25 Intermediate* 45-50 Extremely open
Rump Angle (RA)	1-5 Pins clearly higher than hooks 25 Slight slope from hooks to pins* 45-50 Extremely sloped from hooks to pins
Rump Width (RW)	1 Extremely narrow 25 Intermediate 50 Extremely wide*
Rear Legs - side view (LS)	1-5 Posty and straight 25 Intermediate set* 45-50 Extremely sickled
Foot Angle (FA)	1-5 Extremely low angle 25 Intermediate* 45-50 Extremely steep

Fore Udder Attachment (FU)	1-5 Extremely loose 25 Intermediate strength 45-50 Extremely snug and strong*
Rear Udder Height (UH)	1-5 Extremely low 25 Intermediate height 45-50 Extremely high*
Rear Udder Width (UW)	1-5 Narrow rear udder 25 Intermediate 45-50 Extremely wide rear udder*
Udder Cleft (UC)	1-5 Weak cleft 25 Intermediate 45-50 Extremely strong cleft*
Udder Depth (UD)	1-5 Very deep udder floor below hocks 25 Intermediate* 45-50 Extremely high
Front Teat Placement (TP)	1-5 Extremely wide on outside of quarters 25 Centrally placed* 45-50 Base of teats on inside of quarters
Teat Length (TL)	1-5 1-1/4 inches or smaller 25 2-1/4 inches* 45-50 3-1/4 inches or longer
Rear Legs - rear view (RL)	1-5 Severe toe out 45-50 No toe out*
Udder Tilt (UT)	1-5 Rear quarters deep 25 Front and rear quarters level* 45-50 Front quarters deep

1. Cow 1

ST 46
SR 43
BD 49
DF 22
RA 29
RW 48
LS 21
FA 22
FU 47

UH 43
UW 45
UC 46
UD 15
TP 7
TL 27
RL 46
UT 30

2. Cow 2

ST 25
SR 46
BD 44
DF 25
RA 43
RW 48
LS 25
FA 25
FU 43

UH 45
UW 45
UC 1
UD 25
TP 25
TL 25
RL 48
UT 30
