

*2008 National FFA Dairy Cattle Event*

**Official placing/cuts for Pedigree Class:**

**2 - 1 - 3 - 4, with cuts of 5 - 4 - 3**

**Official placing/cuts for Sire Selection Problem No. 1:**

**2 - 4 - 1 - 3, with cuts of 5 - 5 - 2**

**Official placing/cuts for Sire Selection Problem No. 2:**

**3 - 2 - 1 - 4, with cuts of 4 - 5 - 3**

## Official reasons for placing sire selection classes:

**PROBLEM # 1:** From the scenario, it is determined that the breeder is concerned primarily with creating a profitable daughter in his milk market which has fluid pricing, which is high producing but functionally sound to support that producing ability that can remain in the herd for several lactations.

The cow to be mated is above the herd's lactation averages for milk yield and fat and protein yield. According to her linear information she is average for stature, strength, and body depth. Her feet and legs are adequate. The udder attachments are all average or higher.

Considering the available bulls, they can be ranked first on their Net Merit \$ since this criterion reflects perfectly the selections goals of the herd owner. This leads to a ranking of 2-4-1-3. Next, consideration should be given to Fluid Merit\$ since milk is marketed to a fluid market with a resulting ranking of 2 over 4 with 1 and 3 being the same. This should lead one to rank the bulls 2-4 in the top pair and 1&3 in the bottom pair. Type traits are similar for all bulls and not a major consideration in this mating since the cow is at average or above in type traits of concern for this mating.

This class can then be easily placed based on the rankings of net merit and fluid merit \$. The top pair is easily #2 over #4 with a closer placing on the bottom pair. Since net merit \$ includes the goals of longevity in the mating for this breeder, #1 with a higher net merit \$ value places over #3 in the bottom pair.

**For these reasons, the best placing for this class of sires is 2-4-1-3, with cuts of 5-5-2.**

### **PROBLEM # 2:**

In the scenario, it is indicated that the dairyman is primarily concerned with production, fertility, and longevity (these traits are economically weighted in the Jersey Performance Index (JPI)), and sire conception rates for the herd. The market pays on cheese yield. The second goal is to put emphasis on type traits for correct feet and legs with functional udders.

The cow to be mated is above average for milk, fat, and protein. According to her linear traits, the cow is below average in udder depth. The cow has adequate strength and dairy form with desirable rump characteristics. Her legs are a correct with a steep foot angle.

When ranking the available bulls, the JPI values show very close values with the following ranking, 2-1-3-4. Since the herd ships to a cheese plant, the Cheese merit\$ should also be considered, with a ranking of 3-2-1-4.

To further determine the ranking of these sires, fertility and sire conception rate must also be considered to meet the goals of the dairyman. When looking at sire conception rates the ranking is 3 the highest and 1 the lowest. When considering fertility with daughter pregnancy rate the ranking is #3 the highest and #4 the lowest. With additional emphasis on longevity, #3 ranks the highest for productive life and #4 the lowest. In the type components for which the dairyman is concerned, udder depth is best improved by bull #3, then #2 followed by #4 and #1.

The final ranking can be determined by combining the results of these rankings. Although #3 is not the highest ranking bull for JPI, he is the highest ranking for cheese yield, productive life, sire conception rate, and daughter pregnancy rate. He also has the highest reliability and the best chance to improve udder depth in this mating. In the middle pair is a closer placing between #1 and #2. #1 has higher reliability and higher productive life. #2 is higher in all the other traits and because of this #2 does place over #1 in the middle pair. In the bottom pair #1 ranks higher than #4 in all traits except udder depth and sire conception rate. However, this is not enough to get #4 over #1 in the bottom pair.

**Considering these points, the official placing for these sires is 3-2-1-4 with cuts of 4-5-3.**