Hay Judging Guidelines for County Fairs

Maturity

Plant maturity is the most significant factor affecting hay quality. About 70% of hay quality is determined by the stage of maturity of plants at harvest. As legumes & grasses move from vegetative (producing leaves) to reproductive stages (flowers, heads & seeds) they lose quality. As plants mature, more energy goes into the reproductive stage than the vegetative stage resulting in stemier plants. Stems are high in fiber and will increase overall yield/production, but are lower in protein.
-As grass matures and seed heads appear, hay quality begins to drop. You want so see very few developed seed heads in a grass hay. (ex: Bermuda, Fescue, Timothy)

-Legume hays like Alfalfa, and Clover reach their highest quality from late bud (beginning of flower development) to 20 % bloom. You want to see some 'flowers' present as well as leaves.

-Alfalfa/Grass mixtures should be cut based on the stage of maturity of the alfalfa (legume).

-Clover/Grass mixtures should be cut based on the stage of maturity of the grass.

Texture

Texture refers to the flexibility of the stem in relation to stem size. The larger the stem, the less pliable it becomes. You want to look for flexibility over toughness/brittleness. As plants mature, the stem size increases becoming less pliable, higher in fiber, and less digestible.

Leafiness

Proportion of leaves to stems is important in all hays. Leaves are the vessel that nutrients are stored in. You want to look for 50 % or more of the total sample to be comprised of leaves. If less than this, it is considered to be 'stemy.' Leaf Shatter is a condition where the leaves fall apart upon handling. If shattering is excessive, then it should be graded lower due to the potential for feeding waste.

Foreign Matter

Samples should be 'clean' aka free of weeds and other foreign matter.

Smell

Samples with musty odors should be graded lower. This is a sign of mold that could be contributed to moisture level at harvest or storage conditions.

Color

You want to look for samples that do have a green color. This is called brightness. Samples that are light/tan/bleached in color are evidence of excessive weathering and or age. Samples that are dark may be evidence of hay that has been baled too wet and have begun to mold.

- General Ideas and descriptions taken from Texas Agriculture Extension Service 'Hay Judging Guidelines'