



Back to Basics

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Later calving dates

Traditional management practices on many Intermountain West ranches include calving in February and March. In many instances, calving during this time period is based on tradition, breeding problems inherent with public land, common allotments and/or the neighboring ranch's breeding program. Some operations set breeding dates based on marketing considerations of the calf, while other ranches simply cannot keep bulls separated from cows in early spring due to lack of adequate fences. Regardless of the reason, oftentimes these programs are not a "good fit" with Mother Nature. Tradition often becomes an obstacle to change. This may or may not be the case on your operation.

Synchronize with green grass

It is well-researched and documented that the most economical means for a producer to utilize the forage base at his or her disposal is to calve in synchrony with green grass. Grass green-up

for much of the Intermountain West is April, May and June. In 2003 the University of Nevada College of Agriculture, Biotechnology and Natural Resource (CABNR) Gund Research and Demonstration Ranch changed the management program of its research herd. This change was initiated in an effort to better match the production cycle of the cow to the available forage base and to document and report to western cattlemen the economics of such a change.

A thorough evaluation of the forage base suggested that it might be advantageous to move the calving dates 45 days to begin on April 15 as opposed to late February and March as had been the traditional practice. In central Nevada, where the research ranch is located, green forage is usually off to a good start by April 15. Peak nutritional requirements of cows calving in mid-April could be met by the available forage instead of supplemental processed feed. Additionally, weather conditions are often more

favorable to calving during this time period, resulting in a higher survival rate among newborn calves.

Positive results

Since implementation of later calving, ranch employees have had life much easier. No longer are employees fighting mud and snow, thawing frozen calves and doctoring for scours. These issues are no longer of prominent concern. Cows have been given the opportunity to better provide for themselves, thereby reducing labor needs and generally making life easier for both man and beast.

The advantages of later calving are best illustrated from the standpoint of supplemental winter feed requirements. By advancing calving time 45 days, the all-important last trimester of pregnancy and associated increased nutritional requirements have also been moved ahead.

During open winters when standing feed is adequate, 45 days of feeding

has been substantially reduced or even eliminated. The presence of green forage by April 15 also eliminates the need to provide supplemental nutrition during the postpartum anestrus and lactation period. During harsh winters or when standing feed is not available, hay of a lesser quality is fed, resulting in cost savings. At the Gund Ranch, changing the calving season to begin in mid-April has reduced the amount of hay fed by one-half ton per head.

Substantial cost savings have also been realized in the area of heifer development. Breeding replacement heifers 21 days prior to the mature cow herd is a common research-based practice. If the mature cow herd begins calving in February and March, yearling heifers must be pushed to reach target weight by mid-April, requiring expensive protein and energy supplementation. Additionally, when these heifers calve the following year, supplemental postcalving nutrition must be provided to a growing, lactating

animal for at least 60 days and perhaps longer.

By moving the calving dates to April 15, researchers expect a much more favorable response from green forage, enough that most of the development of the replacement heifers can be accomplished by Mother Nature. Researchers believe, under this regimen, heifers can be bred to calve at the same time as the mature cow herd without affecting performance.

Lighter calves, other concerns

Perhaps the aspect of later calving that is most difficult to accept is the fact that calves are younger, thus they are lighter at shipping. This is true; however, the reproductive cycle of the cow is much more synchronized with Mother Nature. Researchers do not expect the reduced weights to be that profound.

Additionally, lighter does not necessarily mean less value. Because of the strong demand for four-weight calves in late November, lightweight calves may actually be worth as much or more per head than a five-weight calf. (See "The Four-Weight Calf" on page 60 of the September 2006 *Angus Beef Bulletin*.)

This fact, plus the cost savings associated with reduced winter feed, heifer development and labor indicates that moving calving dates ahead to April and May can be economically beneficial.

Evaluating the forage quality of rangelands during the hot July and August "new" breeding period is of concern to researchers. In central Nevada, forage quality during this period seldom provides adequate nutrition for breeding. Researchers found it necessary to use irrigated meadows for breeding, a drastic move and redirection of resources. The jury is still out regarding this practice; however, researchers feel this might be a "good fit" under the UNR Gund Ranch forage base, resources and objectives.

The authors of this article have submitted a hatch grant proposal to study the feasibility of alternative calving dates for ranching operations in the Intermountain West. The concept is not new and certainly has been documented by other researchers. However, this project specifically looks at this practice through the eyes of an Intermountain West range livestock operation heavily dependent on federal lands grazing where resources are often limited.

Look for results of this research project in future issues of the *Angus Beef Bulletin* and at future Cattlemen's Update programs. For more information on the project, contact Ken Conley, Gund Ranch manager, at (775) 964-2628.



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Editor's Note: *Torell raises registered and commercial Angus cattle near Elko, Nev.*