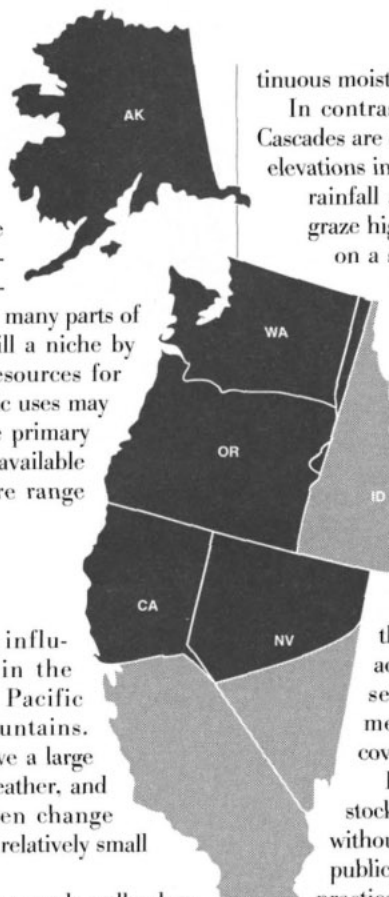
PACIFIC NORTHWEST



Beef cattle production in the Pacific Northwest is influenced by a number of challenges. Some of these are common to other regions; others somewhat unique. As with many parts of the country, cattle fill a niche by being able to use resources for which other economic uses may be hard to find. The primary abundant resources available in the Northwest are range and forage.

GENERAL CLIMATE

The two major influences on climate in the Northwest are the Pacific Ocean and the mountains. These two things have a large influence on local weather, and conditions may often change dramatically across a relatively small distance.

Because of this we can broadly characterize the Northwest as two different regions. The dividing line is generally regarded as the crest of the Cascade Mountains. The area on the west side of the Cascades has a relatively mild climate both in the winter and summer. Snowfall can be heavy in the higher mountains, but the lower elevations are cool and rainy in the winter.

Summers are mild and dry, with cool nights. Temperature extremes are usually not a problem in either season. Terrain is mountainous and heavily forested other than in the fertile valley floors.

Cow herds tend to be small and maintained on limited acreage. Cows may be maintained on pasture in the winter with hay or silage supplementation. However, unless the pastures are well drained, excessive sod damage may occur because of continuous moisture and waterlogged soils.

In contrast, grazing areas east of the Cascades are commonly much drier. Lower elevations in this area experience minimal rainfall and cold winters. Cattle may graze high quality mountain meadows on a seasonal basis and spend winter in the valleys. One real challenge is that the extremes of this variation may often be found within one ranching operation. It is not uncommon for an individual cow to graze on the desert in the winter or spring then spend her summer in the higher mountain ranges. Because of the low productivity on a per acre basis, this region lends itself to an extensive management system with large herds covering large acreages.

It is difficult to talk about livestock production in the Northwest without mentioning the impact that public land policy has on production practices. In much of the area, it is difficult if not impossible to put together a viable operation without relying on public grazing leases. Across many western states, federal or state ownership of land exceeds 50 percent of the total land area. This percentage may be much higher in the areas which include much of the rangeland suitable for grazing cattle. The terms of the grazing lease dictate the duration and season of use on these ranges. Production systems must then be adapted to accommodate these requirements.

In addition, issues such as endangered species and environmental quality are of increasing concern as tighter restrictions on use of public land are considered.

FEED RESOURCES

Regardless of where you go in the Northwest, the predominant feed resource is forage. This will vary from highly productive cool-season pasture to the scarce punchers and sagebrush of the high desert ranges. While the quality of the desert ranges may be good at certain times of the year, the total amount of forage available will put a limit on the acceptable levels of mature size and milk production.

Across most of the drier parts of the region, moderation is the rule for both mature size and milking ability. Producers will generally strive for reproductive efficiency at the expense of higher growth rate. In contrast, those with access to higher quality forage, such as cool-season pasture or mountain ranges, can afford to take a more aggressive approach to performance without sacrificing reproductive success. Because of the wide degree of geographic variation, these extremes may often be found within a few miles of each other. One ranch may operate mostly in the desert while the neighboring ranch has access to higher quality mountain pastures during the growing season.

Although large amounts of feed grains are not grown, small grains such as barley and wheat provide a locally available source of concentrate. Cattle will generally be wintered on hay, although winter grazing of desert ranges is gaining favor in some places. Most of the drier areas use flood or sprinkler irrigation for hay production.

Large amounts of vegetable waste, such as potato waste or cannery by-products, may be available in some places. It is uneconomical to transport these by-products very far because of the high moisture content. Nevertheless, they provide a locally important source of feed for those producers who can take advantage of them.

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MARKETING

Many ranchers have traditionally marketed calves at weaning. As producers have increased the quality of their calves through better genetics, retained ownership is increasingly being explored as a way to capture the increased value. But harsh winters, limited winter feed supply and low quality summer grazing still restrict many ranches to traditional marketing practices. Even in the western areas with higher rainfall and more abundant feed, many herds are small and the owners are reluctant to consider retaining their calves.

Depending on local availability of feed, there is a limited cattle feeding industry and some summer grazing of yearlings. But cow-calf operations still predominate because the vast areas of range are more suited to maintaining cow herds as opposed to growing animals.

IN SUMMARY

Although many people immediately picture the rugged coastlines, tall trees and lush green valleys of the coastal Pacific Northwest, the reality is the majority of the area is contained in the sparsely populated interior regions. Even though much of this land is relatively unproductive on a per acre basis, the total acreage available dictates where most of the cattle are.

Producers in this area have long taken to heart the principles of low cost production. The limited capacity of the range to support cows with large mature sizes and high milk production dictates use of cows that have the ability to produce and reproduce efficiently.

However, moderation and efficiency in the cow herd no longer need to imply a lack of acceptable performance. Many producers use expected progeny differences (EPDs) to select efficient cattle that match the environment yet still gain well in the feedlot and produce a desirable carcass.

ABOUT THE AUTHOR

Jerry Arnold was raised on a commercial cow-calf ranch in southwestern Kansas. He received his B.S. in animal science in 1979 from Kansas State University, then returned to the family ranch and entered business with his father.

In 1986 he entered graduate school at the University of Georgia under the direction of Larry Benyshek and Keith Bertrand. While in graduate school, his primary research interest concerned methods for genetic evaluation of multiple breed datasets. He was also involved in projects concerning genetic evaluation for carcass traits and applications of EPDs to multiple trait selection.

Arnold joined the faculty at Oregon State University in August 1991, where he is involved in applied beef cattle research and Extension work.

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