



Rangelands, abundant with diverse plants in summer, may face winter limitations due to heavy snow cover, making it challenging for sheep to access food. Research shows that **sheep adapt their diet based on plant availability**. Ranching operations with diverse plants met ewes’ nutritional needs better than those relying solely on dormant grass.

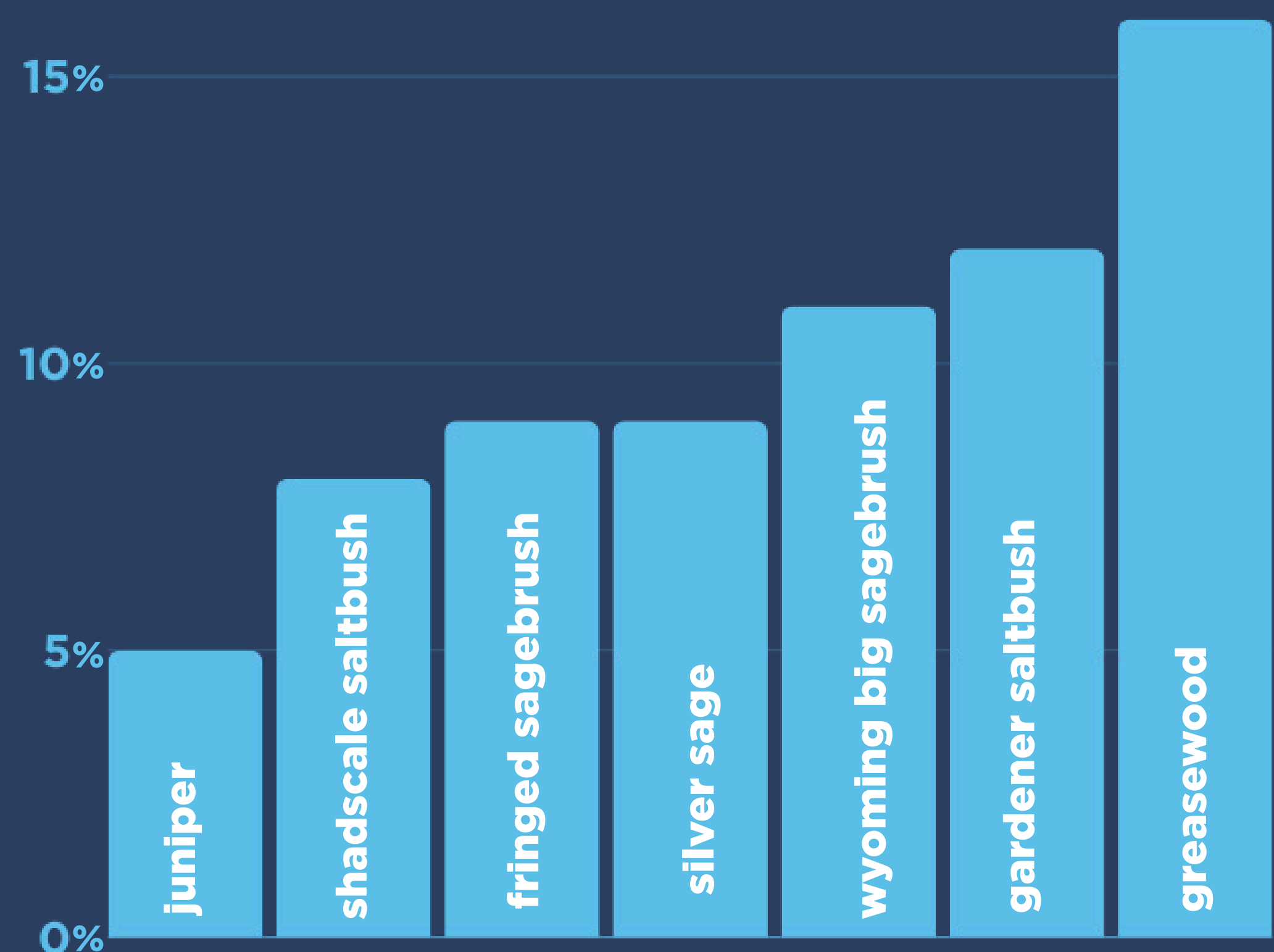
The **key to optimal winter nutrition is understanding when to supplement or substitute feed**, which is crucial during snowy winters when ewes struggle to graze. Providing **supplemental amounts of alfalfa, grain, or grain by-products** is an effective way to **help ewes on the winter range meet their protein and energy requirements**.

DID YOU KNOW:

Ewes in diverse rangelands consume a variety of plants, **AND shrub species, often overlooked, provide higher crude protein (CP) and minerals than grasses**.

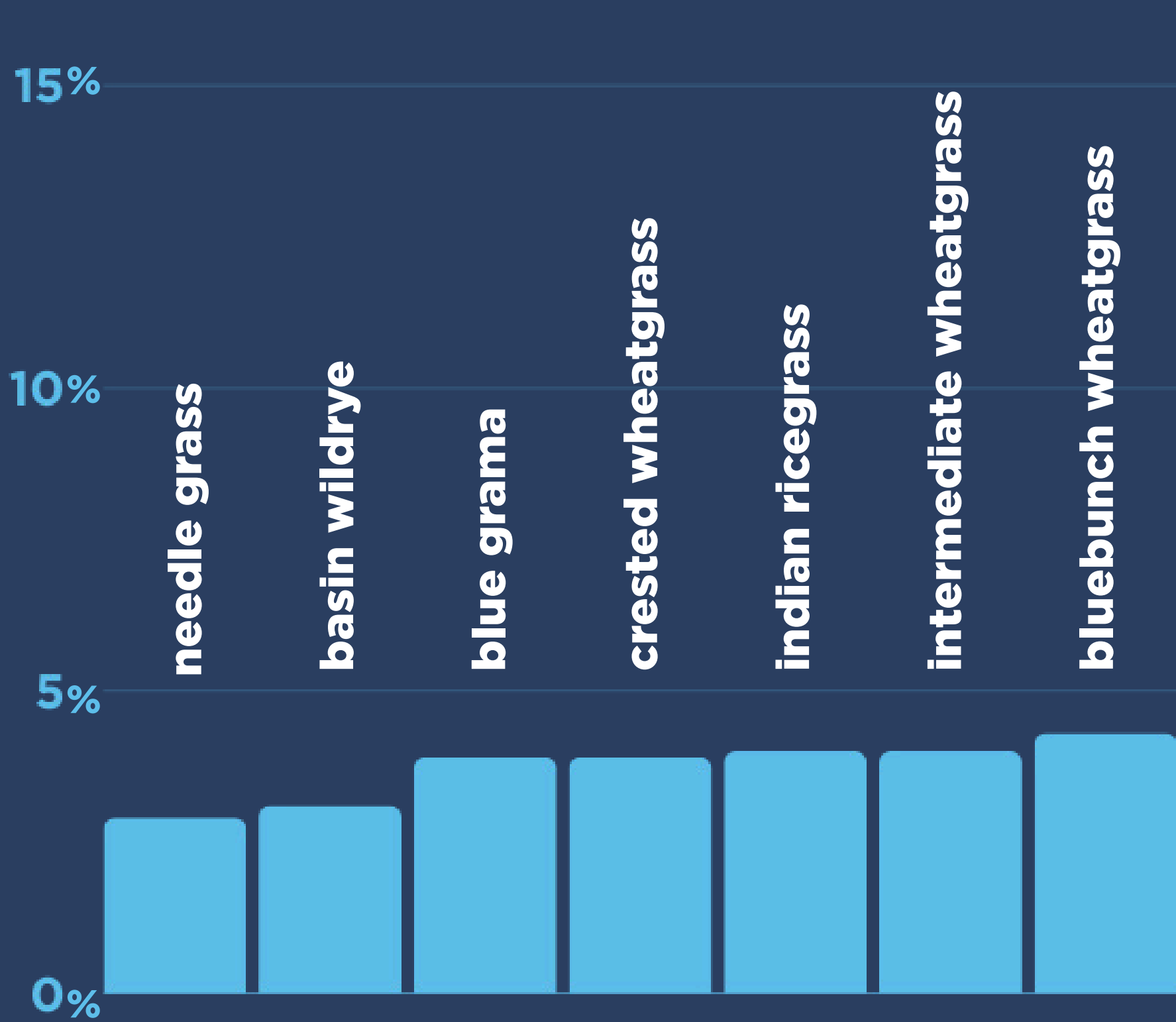
Shrub species contain more **calcium, phosphorus, potassium, magnesium, sulfur, sodium, zinc, copper, and manganese** than grasses.

SHRUB CRUDE PROTEIN



VS.

GRASS CRUDE PROTEIN



HOW DO I KNOW WHEN TO SUPPLEMENT OR SUBSTITUTE?



*supplement = providing high-energy or high-protein feed. substitute = providing the base material



Deep snow cover limits ewes’ access to feed, **requiring a shift to substitution** to meet basic nutrient needs.



Alfalfa and **corn** are common supplements; alfalfa can be a cost-effective source of CP.



Contrary to popular belief, research shows **feeding corn** at 0.5% of a ewe’s body weight or around 23% of daily intake **increases low-quality feed consumption on the winter range**.



Consider nutrient requirements for maintenance, flushing, early and late gestation, and early and late lactation.

1/2 LB OF CORN PROVIDES NEARLY 40% OF THE ENERGY REQUIREMENTS FOR A 160-POUND EWE FOR AN ENTIRE DAY