

Hedging Class (Adapted from the extensive browse utilization technique.)

Hedging classification is an ocular estimation of current and historic plant utilization. The major shrub species in the stand are examined and placed in one of three classes. Plants in **Class One – (Little or No Hedging)** refer to plants that have received light use in the last 3 to 4 years. Plants placed in **Class Two – (Moderate Hedging)** have experienced use in the past 3 to 4 years that has caused much development of lateral branching and a more complex growth form. Those plants placed in **Class Three – (Severely Hedged)** have been subjected to heavy use in the past 3 to 4 years which has caused a clubbed or broomed appearance. The assumption is that the entire plant is available to be browsed. If this is not the case, then another plant should be examined. Results are recorded as a percent of the total number of plants examined. Hedging surveys can be conducted anytime during the year, however, the condition of deciduous plants is most evident following leaf drop.



Severely hedged antelope bitterbrush.

HEDGING CLASSIFICATION

HEDGING CLASS	DESCRIPTION
1	Little or no hedging – Indicates light use in the past 3 to 4 years.
2	Moderate hedging – Use in past 3 to 4 years caused much development of lateral branching and more complex growth form.
3	Severely hedged – Heavy use in the past 3 to 4 years caused a very much clubbed or broomed appearance.

Shrubs in Hedging Class 1 are able to withstand moderate browsing pressure from ungulates, Hedging Class 2 shrubs are keeping up with annual herbivory, but browsing pressure should likely not increase from current levels. Shrubs from Hedging Class 3 are in poor condition. These shrubs are being impacted by herbivory that will result in reduced production and plant vigor, and are at high risk of mortality.

Shrub Stand Age Classification

Shrub stand age data is collected as it may be reflective of the health of the overall shrub community, individual shrub species health, interval between perturbations, natural range of variability, potential vigor, recruitment and replacement of shrubs and palatability to browsing animals.

Shrub Age Classification (Primarily from the extensive browse utilization technique):

Shrub age classifications give a measure of the condition of the stand by providing a determination of the percent of the stand that is young, mature old, dying or dead. Age classifications also provide insight into whether or not the stand is replacing itself through recruitment. Plant age (or condition) determinations should be made using the following criteria:

Young (Y): intermediate age plant between seedling and mature; exhibits more complex branching, more fibrous bark, and greater root development than a seedling, but the branching is still simple, on elongated growth, and the plant does not produce seed. The basal stem diameters for evergreen species are usually less than 1/4 inch, and for deciduous species usually less than 1/2 inch.

Mature (M): plant producing seed when healthy (vigorous), stems heavier and often gnarled, branching complex, and foliar crown made up of more than 50% living branches.

Decadent (D): plant in a state of decline that exhibits 50% or more dead branches regardless of age.

Dead (DE): plant that exhibits 100% dead branches.



Hedge Class 2
Age Class - Mature



Hedge Class 3
Age Class - Mature



Hedge Class 3
Age Class - Mature



Hedge Class 3
Age Class - Decadent