## Big Sagebrush

(Artemisia tridentata)



Big sage grows on over half of

Where does it grow? Big sagebrush grows where the deer and the antelope play. It is the most common shrub on eastern Oregon ranges. It is happy in the desert, hates water, and dies where water stands. Likes deep, open soil -doesn't like alkali. It is not common in western Oregon. It occupies, to some extent, at least 20 million acres in eastern Oregon and is found with cheatgrass, Idaho fescue, yarrow, low larkspur, and annual weeds. The better the soil, the bigger the sage. Big sage was not always thick, as it is now. It comes in as the grass is weakened or killed.

Is it important? The leaves are about like alfalfa in protein, and the stock nibble on it a little in the late summer and fall when eastern Oregon rangeland (1/20 x) other feed dries. Deer and antelope use it in fall and winter. Birds eat the seeds. If it

weren't for the bitter taste, stock would like it better. Early settlers and Indians used it for fuel. Its importance is mainly because it covers so many millions of acres that might otherwise be producing feed that stock like better. It helps to prevent erosion though.

What does it look like? It is an open, spreading bush about 4 feet high in most places, but in good soil along creeks it occasionally gets up to 15 feet. Leaves are broken at the tip into a "3-fingered Jack" appearance; are 1/2 inch up to 1 inch long, taper at the base, but flare out at the divided tip. The silvery leaves up near the flowers sometimes fail to divide. Flowers appear in the fall, are yellow, and in dry years are hard to see. Seed forms in September and falls out when mature.

Stems are silvery at first, but in a few years turn grey and are covered by ragged, shredding bark. New growth comes each spring, and depends upon moisture. The new shoots are narrow with small leaves, and usually come at the tips of the old shoots.



Close little finger and thumb into palm, stretch out 3 middle fingers. Back of hand and fingers now look like a big version of a sagebrush leaf (2 x).

If a plant is broken off at the surface, or burned off, the plant usually dies. It is also easily killed by worms or by hard trampling. Roots are very deep.



Bark is stringy and constantly shredding. Indians used the bark for weaving moccasins  $(1 \times)$ .

## Description: (continued)

Length of Life--About 75 years, if all is well. Cut a big stem and count the rings.

Height--A few inches up to 3 to 5 feet, usually. If made happy by soil and moisture, it tries to be a tree and gets 15 feet tall.

Leaves--Pointed at base, flare out at tip which is divided into 3 points. Silvery, due to very small hairs.

Flowers--Inconspicuous, occur in late summer, yellow, grow on current season's shoots.

Seeds -- Very small, top shaped, ribbed or angled.

Stems--Brittle, branched and rebranched, silvery when young, turning grey with age, and they then shed the bark in irregular strips, giving an appearance of carelessness and sloppy dressing.

Roots--Deep, spreading, cannot send up new shoots.

How Does it Spread -- Entirely by seeds.

Taste and Smell--Tastes bitter, smells spicy. Spread your bed on sage and it keeps the sage smell for months if rolled up. The stems are wonderful for fire for broiling meat. They give meat fine spicy flavor better than anything else. Try with venison sometime.

Other Names -- Black sage or purple sage. Why? I don't know.



White Sage or Silver Sage. (Artemisia cana) Grows on flats too wet in spring for big sage. Fairly good winter feed (1/8 x).



Dark Sage or Little Sage. (Artemisia arbuscula) Low, bushy plant on thin rocky soil in desert-like places. Excellent forage (1/8 x).



Stiff Sage. (Artemisia rigida) Found in rocky scab lands along Columbia River. Silvery color, leaves divided clear to base (1/8 x).

Does it look like other plants? Yes, rabbitbrush looks like big sage and also has yellow flowers. Leaves of rabbitbrush do not have the 3 tips. Look at the botanical name. Tridentata means 3-tipped. Match weed also looks like it, but its leaves are pointed too. Bitterbrush leaves are 3-tipped, but leaves are dark green and the bark is dark and not stringy. Bitterbrush blooms in the spring. There are many other sages. Most important in Oregon are pictured.