THE
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

AND

FOREST SERVICE

AND

WASHINGTON STATE UNIVERSITY AGRICULTURAL RESEARCH CENTER

AND

WASHINGTON DEPARTMENT OF WILDLIFE

AND

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

NOTICE OF THE RELEASE OF 'UMATILLA' SNOW BUCKWHEAT (ERIOGONUM NIVEUM Dougl. ex Benth.)

Notification of the naming and release of 'Umatilla' snow buckwheat. 'Umatilla' was selected at the Soil Conservation Service, Plant Materials Center, Pullman, Washington.

'Umatilla' snow buckwheat, Eriogonum niveum Dougl. ex Benth. is a seed propagated cultivar recommended for use on rangelands, wildlife upland habitat improvement, and critical area stabilization.

'Umatilla' is a half-shrub, up to three feet in height, with spreading branches. The attractive flowers are white to pinkish, bloom in late summer, and are a good source of nectar for honeybees. The brown achenes mature in October. The light green leaves are densely covered by white hairs. Snow buckwheat is considered to be moderately important as food for wildlife. The plant comprises a substantial proportion of the early spring diet of mule deer along the Columbia Breaks in north-central Washington.

Snow buckwheat is a native pioneering plant species to big sagebrush and antelope bitterbrush plant communities from British Columbia to central Oregon, from the Cascade Mountains to west-central Idaho.

ORIGIN: 'Umatilla' snow buckwheat originates from seed collected from a native population near Juniper Canyon, in Umatilla County, Oregon in 1979. It was first assigned the accession number U-10 by the U.S. Forest Service, later

assigned a temporary SCS number 9033813. In September, 1998, it was officially designated PI- under the name Eriogonum niveum Dougl. ex Benth. by the USOA Agricultural Research Service.

DESCRIPTION: 'Umatilla' snow buckwheat is a low, much branched shrub, height and width up to 3 feet (91 cm). It is densely white, tomentose throughout. This plant is tufted from a loose woody caudex, stems 11-14 inches (28-35 cm) tall, several times forked, the branches in twos or threes. The basal leaves numerous, petioled': blades 1.2 - 1.5 inches (3-4 cm) long, elliptic or ovate, obtuse, densely white, wooly, pubescent on each side;everlasting. The flowers are white when in full bloom, often pinkish prior to then turning brown as ripening occurs. The pericarped achenes are 3-4 mm long, glabrous trigonous, lanceloid, upper part cellular reticulate, shatter readily at maturity.

ADAPTATION: 'Umatilla' snow buckwheat is adapted to well drained, silt loam to sandy soils where the mean annual precipitation is 6 to 18 inches (152 - 457 mm). The species naturally occurs in east of the Cascades in British Columbia, Washington, and Oregon and in southern Idaho at elevations from 500 to 4900 feet (150 - 1500 m), often on dry south or west-facing slopes. This species appears to prefer full sunlight, but is sometimes found in the understory of big sagebrush, bitterbrush, or ponderosa pine.

PERFORMANCE: The USDA Soil Conservation Service has evaluated the performance of snow buckwheat at the Plant Materials Center located at Pullman, Washington. Off-center evaluations were conducted at Lind, Central Ferry, Entiat, Hanford, and Moses Lake in Washington, Moro, Oregon and Boise, Idaho. A total of 114 accessions of snow buckwheat have been evaluated at Pullman and the other locations previously mentioned. 'Umatilla' was selected for release. because of its better seed production, ripening date n mid-October, larger height and width at maturity, and the best survival and growth on droughty sites in central Wash ngton. The seed longevity is short, expected storage life is one-two years.

MATERIAL DISTRIBUTION: Foundation stock will be available September, 1991 in limited quantities to commercial nurseries and researchers through the Washington State Crop Improvement Association (WSCIA) Foundation Seed Service, Pullman, Washington. The USDA, Soil Conservation Service, Plant Materials Center (PMC), Pullman, Washington 99164 will maintain original mother plants for supplying certified stock. The expected maximum breeder seed production by the Pullman PMC is fifteen pounds pure live seed (PLS) annually. Plant material should be available commercially by 1992.

EVALUATION OF SNOW BUCKWHEAT (Eriogonum niveum), 7/22/89

Site: Moses Lake (Dodson Road), Washington
Evaluated By: Scott Lambert, Jack Carlson, & Chuck Perry
Annual Ppt: 8 inches

Accession:	U-4	U-6	U-10
Survival (%)	13	33	27
Vigor Rating*	8	5	2
Ave. Plant width (in)	3.2	5.3	7.6
Ave. Height (in)	2.2	3.7	3.9
Seedheads (%)	0	30	75

*vigor rating: 1 = excellent, 2 = very good, 4 = fair, 5 = low fair, 8 = poor, 9 = very poor

NOTES: U-10 plants were mere vigorous, larger plants and more seedheads than the other accessions. Weed competition is slight to moderate; cheatgrass is the most common, also found a few scurfpea on the plot. A few native snow buckwheat are located on the east plot boundary. One bitterbrush is surviving, was transplanted to the site in 1983, on the north plot boundary. Average of 15% groundcover within the plot. U-4 is Entiat origin, U-6 = Moses Lake, and U-10 = Umatilla, Oregon.