

	Height	Makes a good screen	Deer- resistant	Degree of drought- tolerance	Description
Bitter cherry <i>Prunus emarginata</i>	8-12'	yes		medium	Smaller than choke cherry with bright red berries. Spreads through roots. Likes rocky, exposed sites. Birds, like waxwings and robins, and bears eat both bitter and choke cherries.
Choke cherry <i>Prunus virginiana</i>	15-20'	yes		medium	Dark red berries in late summer. Foliage displays rich fall colors. Nectar and larval host plant for two-tailed swallowtail butterflies.
Bitterbrush <i>Purshia tridentata</i>	3-5'			high	Yellow blossoms in spring. Important winter forage for mule deer. Larval host plant for Behr's hairstreak and California hairstreak butterflies.
Smooth sumac <i>Rhus glabra</i>	6-10'			high	Brilliant fall color. Spreads through roots. A favorite deer browse; ruffed grouse eat the fruit.
Wax currant <i>Ribes cereum</i>	3-5'			high	Small white blossoms with red-orange berries. First shrub to leaf out in spring. Purple finches eat the flowers.
Woods's rose <i>Rosa woodsii</i>	3-7'			medium	Fragrant pink flowers in spring. Dense growth provides excellent cover for wildlife; rose hips provide food for birds and mammals.
Purple sage <i>Salvia dorrii</i>	2-4'		yes	high	Striking purple blossoms atop grey-green leaves. Very aromatic. Magnet for native pollinators.
Blue elderberry <i>Sambucus cerulea</i>	10-15'	yes		medium	Large spreading shrub with flat-topped clusters of small white flowers. Powdery blue berries in late summer attract black-headed grosbeaks, western tanagers, and cedar waxwings.
Common snowberry <i>Symphoricarpus albus</i>	3-4'		yes	low	Found in draws and moist swales. Persistent white berries feed grouse, pine grosbeaks, varied thrushes, and showshoe hares.

# Seeding Your Land

Planting seed is the most cost-effective way to reestablish shrub-steppe habitat, but broadcasting the seed is only one of several steps. Careful planning and attention to critical growth stages can yield beautiful stands of bunchgrass and wildflowers.

## The Best Seed Is Collected by Hand

If you collect seeds from nearby steppe habitat, you can be certain they are well-suited for your land, you'll gain useful knowledge about the steppe, and you'll have fun. But collecting seed is time-consuming and may not be practical for restoring large areas.

To target appropriate plant populations, walk through the shrub-steppe with your field guide in hand while plants are blooming. Return to the area in July or August, when seeds are ripe. Run your hands over bunchgrass or wildflower seedheads; seeds will easily fall off or shake out of capsules. There is no need to clean them or remove chaff. Store seeds in clearly labeled paper bags or envelopes until fall sowing time.

## Purchase High-Quality Seed

If collecting seed is impractical for you, high-quality weed-free native seed is available locally and from large

wholesalers. Most bunchgrass seed sold today comes from *cultivars*, distinct varieties that originated from native plants but were bred over generations to select for certain desirable characteristics. Seeds from these cultivars are distributed widely.

Restorationists who want seed better-adapted to specific sites have begun a recent movement toward *source-identified seed*. Localized native strains may cost a little more but they yield better results in habitats resembling the seeds' origins. Source-identified Methow Valley seeds are being developed and should be available in the future.

## Using Non-Native Seed

In the past, non-native species, especially grasses, were used to reclaim land that had been used for agriculture. These grasses were chosen because they grew quickly, out-competed weeds, and provided livestock forage. As long as they don't invade their surroundings, they remain a viable option for immediate weed control on small sites.

Intermediate wheatgrass, sheep fescue, and slender wheatgrass are non-natives that are aggressive and easy to establish. They effectively revegetate self-contained disturbances that can't be tended often, such as utility corridors or long driveways.

Generic wildflower mixes often contain invasive species like baby's breath or toadflax. Avoid these and buy mixes designed specifically for the Methow Valley. **For large restoration sites, native species are more desirable.**

### THE ETHICS OF SEED COLLECTION

Collect only from large populations. Do not take seeds from rare species. On private land, ask the owner for permission. Collect small quantities of seed from numerous plants.

## Shrub-Steppe All-Stars

### Cutleaf penstemon

*Penstemon richardsonii*

Though penstemons are among the showiest native flowers of the western United States, they're also very popular with deer; this one is an exception. It's found infrequently on rocky slopes in the southern part of the Methow Valley. With wonderful fuchsia flowers, it successfully self-seeds in rocky ground.



### Serviceberry

*Amelanchier alnifolia*

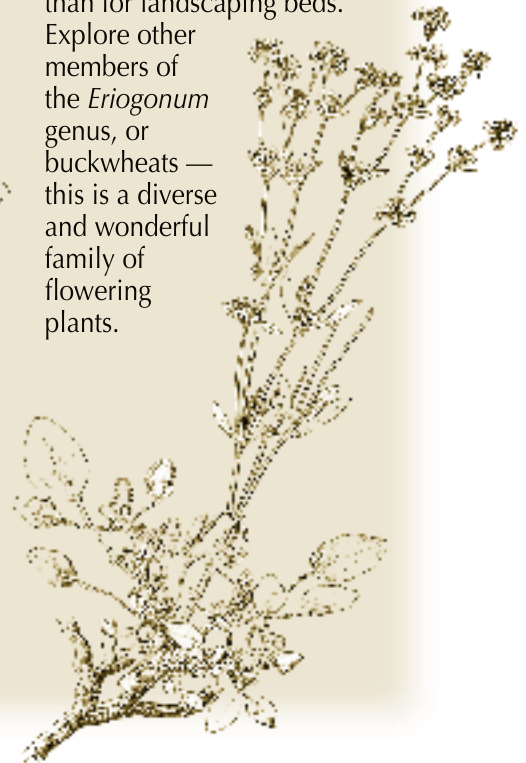
The most common shrub in the Methow Valley, serviceberry is truly a plant for all seasons. Springtime white blossoms are followed with plump purple berries, highly prized by birds and local jam and winemakers. Brilliant yellow leaves brighten fall landscapes and even in winter, densely grouped slender trunks make good privacy screens.



### Snow buckwheat

*Eriogonum niveum*

This modest low-growing cluster of grey leaves sprouts beautiful white flowers. Deer generally ignore it but native pollinators find it alluring. Seedheads turn rusty red in late fall. Because it self-seeds aggressively, it's better suited for large-scale restoration than for landscaping beds. Explore other members of the *Eriogonum* genus, or buckwheats — this is a diverse and wonderful family of flowering plants.



### Prairie junegrass

*Koeleria cristata*

Compact growth form, deep green leaves and attractive seedheads make this diminutive grass a fine addition to any native landscape bed. Junegrass grows among bluebunch wheatgrass and Idaho fescue throughout Methow Valley shrub-steppe. Plant it in groups of five or seven for good contrast.



See other  
Shrub-Steppe All-Stars  
on pp. 20, 34, and 36.

## Prepare the Seedbed

Your seeds stand a much better chance of germinating in correctly prepared soil. Lying on densely compacted soil, seeds are vulnerable to washing away, drying out, or being eaten. Loosen soil by tilling, disking, or hand shoveling — then rake it into smooth contours. In small areas make a good seedbed by adding a thin layer of weed-free topsoil, such as the soil you may have set aside and saved before a disturbance.

### SEEDING STRATEGIES

- Too many seeds cause seedlings to compete against each other for space; too few seeds leave open niches for weeds.
- Weedy, unprepared sites require more seed; well-prepared sites need less.
- For broadcasting, *generally* use about one pound of bunchgrass seed per 1000 square feet. For wildflowers, use one to three ounces per 1000 square feet, depending on the size of the seed.
- Local businesses can supply you with specific information and seeds mixed especially for your site. See the resource section, p. 38.
- Blend bunchgrass and wildflower seed for a diverse community that is visually interesting and attractive to wildlife.
- Don't mix wildflower and bunchgrass seed if you plan to use herbicide for weed control while seeds establish; herbicides kill broadleaf plants like wildflowers. Instead, overseed with wildflower seed after grasses are established.
- Thin or transplant bunchgrasses if stands establish too densely.

Bluebunch wheatgrass, *Agropyron spicatum*

## Schedule Seeding to Mimic Nature's Cycles

Bunchgrass seeds drop in late summer and autumn freeze-and-thaw cycles help work seeds into the ground. They lie dormant until spring, when snowmelt and spring rains keep germinating seeds moist.

Many wildflower seeds like balsamroot and Chelan penstemon won't germinate without passing through the moist, chilly conditions of winter, called *stratification*. Mimic this natural cycle by planting your seeds in fall, just before snowfall. If that's not possible, early spring seeding is the next-best choice.

## Sow the Seeds

**Broadcasting** is the most common seeding method for homeowners. Scatter seed by hand or with a hand-held seeder with a crank. Consult your seed supplier to learn how much of each type of seed to broadcast. Strive to space seeds evenly; following a grid pattern on your site makes this easier.

If you can, create seed-to-soil contact by raking. For large areas, drag a bar or chain, or drive over the site once with heavy equipment to help cover the seed. Be sure your equipment is free of weed seeds.

**Hydroseeding** applies seed in a slurry of mulch. It can be expensive, but built-in mulch gives seeds a good start on getting established, and it's useful in spots that are difficult to seed, like steep roadcuts.

## A SEEDING CALENDAR

These are general guidelines; tailor your seeding schedule to circumstances on your site.

### June - September

Prepare your site by controlling weeds. Periodically water to germinate weed seeds and reduce the seed bank. Plan appropriate revegetation species and locate seed sources.

### September - October

Loosen and smooth any compacted soil then rake in final contours.

### October - November

Distribute and cover seed.

### April - May

Monitor germination and keep soil moist.

### June - August

Water deeply once a month and control weeds.

### October

Reseed areas with poor seed germination.

### May - September

Water once a month to reduce fire risk and enhance growth. Continue weed control.

**Be patient.**

**Drill seeding**, the most effective form of seeding, uses a mechanical drill pulled by a tractor to precisely place seeds at correct depths. It can be expensive, but it uses less seed and is cost-effective on large tracts. Drill seeding is commonly used on agricultural sites, but specialized rangeland drills are now available for uncultivated areas.

## Watering Seeds

While seeds germinate they are vulnerable to drying out, so it's important to keep seedbeds moist. If spring weather is dry, light watering once or twice may keep seeds moist enough as new roots work their way into the soil. Grasses should be well established by early summer. Occasional deep watering will encourage early growth but will also encourage weed growth. In future seasons no watering is necessary, though periodic deep watering stimulates growth and blossoming.

More water isn't always better. Overwatering increases weed competition, washes seeds away, compacts soil, and leaches out nutrients.

In some cases, like on large tracts of land, you may want to seed areas that you will never be able to irrigate. In these situations it's more important to take advantage of natural precipitation and broadcast seed just before snowfall.

## Raise Your Own Seedlings

Propagating your own plants from seed increases your chances of successfully establishing plants. In late September, sow collected or purchased seeds in flats of potting soil and leave them out to stratify in winter. Seedlings will germinate in spring; transplant them into four-inch pots.

Leave pots in partial shade throughout the growing season; water them regularly to keep soil moist but not saturated. Apply a foliar fertilizer to leaves to improve growth; Alaska Fish Fertilizer works well. These homegrown plants will be ready for fall planting. Check the resources section, p.37, for books with detailed propagating instructions.

