



These troopers take HIGH ELEVATIONS, short growing seasons in stride


By Jennifer Jones
and Karen Panter

Where did the spring/summer/fall go?! – A pertinent question for those living in the higher elevations in Wyoming where the growing season has a certain “now ya see it, now ya don’t” quality.

Those who like to grow ornamental plants have solutions for this issue ranging from using season-extending techniques to “survival of the fittest” – allowing the climate to do its worst and see what’s left standing.

What are some of these “survival of the fittest” higher-elevation troopers?

Spring



Crocus and snow iris bulbs – There’s nothing like going outside when snow still blankets the ground to find crocus and snow iris blooming their bright little hearts out! Both of these small bulbs are planted in the fall when they can put down roots to wait

out the winter. At the first sign of spring, they are ready to do their stuff. They are very low-maintenance plants and may, if happy in their location, multiply.


Crocus (3-6 inches tall) come in a wide array of colors. They enjoy full sun, but, since they bloom before many trees and shrubs leaf out, they can be planted near these trees and shrubs, collecting enough solar energy for next year’s growth before they are cast into shade.

Snow iris, sometimes called dwarf iris as they only reach 4-8 inches in height, are among the earliest bloomers. Often, while snow is still present, their beautiful miniature iris flowers emerge. These will be followed by thin, deep-green leaves that persist after the flowers have withered. Most snow iris flowers tend to be in the purple-blue range with a few white-flowered varieties. *Iris danfordiae* is a species having yellow flowers.

The key to using small bulbs in gardens is to plant clumps of them – they have smaller flowers, so, if you

want a significant splash of color, be generous with the number of bulbs planted.

Some other great bulbs for our cold and dry climate are the species tulips (“species,” in this context, is a descriptive term generally used for those tulips that haven’t undergone much plant breeding). Previously, these tulips were hard to find, but they are becoming more popular, have been brought into cultivation, and can now be found through many suppliers. They come in a range of flower colors – red, yellow, orange, maroon, hot pink, and white (See Table 1). They tend to be shorter and have smaller, perhaps less traditionally shaped, flowers.



Did you know Wyoming has the second-highest average elevation, at 6,700 feet, in the United States? Gannett Peak is our highest elevation point at 13,804 feet, and the Belle Fourche River in Crook County is our lowest at approximately 3,100 feet.

Table 1. Spring Bulbs

Crocus	Snow Iris	Tulips
<i>Crocus vernus</i>	<i>Iris reticulata</i>	<i>Tulipa</i> 'Little Beauty' (hot pinkish flowers with dark hearts),
<i>C. chrysanthus</i>	<i>I. histrioides</i>	<i>T. kaufmannia</i> (whites, yellow, red-oranges),
<i>C. tommasinianus</i> 'Ruby Giant'	<i>I. danfordiae</i>	<i>T. humilis</i> 'Persian Pearl' (maroon with a yellow heart),
<i>C. sieberi</i>		<i>T. turkestanica</i> (lots of smallish flowers that are white with yellow hearts),
<i>C. ancyrensis</i> 'Golden Bunch'		<i>T. tarda</i> (yellow with white tips),
		<i>T. clusiana</i> (tall, graceful plants with dainty yellow flowers or yellow with blushes of red), and
		<i>T. greigii</i> (mottled leaves)



Species tulips are more likely to persist over time than the more traditional tulips and, if happy with their location, might increase in number. If plants with interesting foliage along with flowers are desired, take a look at varieties of *T. greigii*. The mottled leaves of these tulips extend their season of interest, giving weeks of enjoyment even before their vibrant blooms open.

Creeping phlox (*Phlox subulata*) – If you wonder if some of the phloxes are adapted to higher elevations, take a trip to the Snowy Range’s Libby Flats lookout in southeastern Wyoming in June or July. If the time is right, bright patches of blooming pink phlox will be scattered across the landscape, which is nearly at 11,000 feet. This low, creeping green plant is covered with blooms in the spring. Blooms come in white, pink, and purple. Once established, it is tolerant of drought.

Mountain alyssum (*Alyssum montanum*) – For a splash of cheerful yellow in spring, try this plant or basket-of-gold (*Aurinia saxatilis*). Both produce a profusion of yellow blooms in springtime. Mountain alyssum has grey-green foliage and tends to be a little shorter, more compact, and a bit more drought tolerant than basket-of-gold, though both are good for low-water landscapes. Both like a good haircut after flowering to neaten them up.

Summer

Summer tends to be the busiest time of the year for blooming plants at higher elevations. There are many plants to choose from.

Penstemon (*Penstemon*) is a large family of plants with many being native to the United States and the western United States in particular. They tend to be short-lived perennials (that is, they come back every year, but they tend to die out after three years or so).

Depending upon where they are planted, they may self-sow, releasing seeds that sprout into new plants. They prefer full sun, though there are a few that can take some shade. You can help them live a bit longer by cutting off the old flower heads and leaving just a few to produce seed. They can get mildew (mostly just cosmetic), and they don’t have a long bloom time.

These plants provide spectacular shots of color into a landscape when in bloom. They vary in height, and you can choose red, red-orange, or yellow blooms to “heat up” a

landscape or blues, purples, white, and pastel pinks to “cool down” the yard. Don’t be surprised if hummingbirds come for a drink.

One penstemon that adds a bit of color to the landscape when it’s not blooming is *Penstemon digitalis* ‘Husker Red.’ It’s so named because the stems and foliage are tinged with reddish/purple. The flowers are actually white. Flower buds are visible in mid-June, and they flower through July.

Iris (*Iris*) has a delicate, tissue-paper thin flower that belies its proven hardiness. The tough nature of

Penstemons

- Penstemon barbatus* (red, coral, yellow)
- P. eatonii* (firecracker red)
- P. strictus* (a native with purple-blue flowers)
- P. linarioides* (shorter, purplish flower, can take some shade)
- P. barbatus* ‘Elfin Pink’ (nice pink, longish bloomer)
- P. pinifolius* (smaller flowers, red and yellow)
- P. virens* (another “shortie” that can take some shade)
- Penstemon digitalis* ‘Husker Red’

this plant means it can still be found occasionally at the abandoned homestead sites in the state. It comes in an immense variety of flower colors and a selection of plant sizes, including dwarf varieties for small gardens. If interested in more season-long interest, check out *Iris pallida* 'Variegata.' This variety has a modest, pale lavender flower but sports spiky variegated leaves of green and white. The leaves can have a blue or yellow cast depending on the plant, which makes them good companions for other plants with these casts to their foliage.

Evening primroses (*Oenothera*) – Some plants

in this family can be quite aggressive, spreading far beyond their initial boundaries; however, Missouri evening primrose, *Oenothera macrocapa*, is one of their better-behaved members. It is a low growing, sprawling plant with deep green leaves and big, bright, sunny flowers, which each last for one day. These flowers are then followed by big, green four-winged seed pods. A great deal of interest has arisen lately with this group of plants, and selections have been found that have a more silvery cast to their leaves. This plant has a deep taproot and doesn't like to be moved, so carefully select its location before planting. These plants grow quickly from seed and often bloom the first year.

Dianthus (*Dianthus*) is a family of plants that has many members ranging in size from taller than 2 feet when blooming ('First Love' dianthus is 15 inches high and has flowers that change from white to rose as they age), to some much smaller plants (*Dianthus* 'Tiny Rubies' with its 2-inch crown of foliage and pink flowers) that are excellent for rock gardens or similar exposures. The members of this family also vary in their water needs. One variety that's more on the



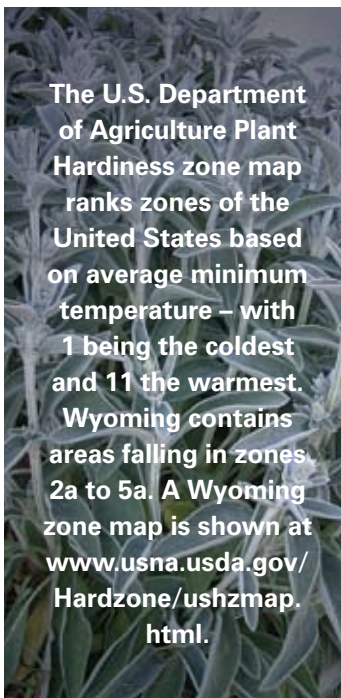
low-water use side is *Dianthus gratianopolitanus* 'Firewitch.' This plant has compact foliage with a blue-grey cast and bright pink flowers. Many of the dianthus also have flowers that smell nicely of sweet cloves on warm, still days, so plant them near a patio where you can enjoy the fragrance.



and several varieties that only bloom occasionally ('Helen Von Stein' and 'Silver Carpet') are available.

Lamb's ear (*Stachys byzantina*) – When planning your landscape, especially at higher elevations, it is a good idea to consider foliage color and texture as well as flowers. Lamb's ear is a plant that can add a lot of season-round interest with its clump of soft, silver-haired leaves – few children or adults can pass up an opportunity to "pet" this plant. Some folks think this plant looks too messy when it blooms as it tends to spread. Happily, both the regular blooming type

You can find further lists of plants (including perennials, annuals, trees, shrubs, and grasses) that thrive in our challenging environment in a series of publications from the University of Wyoming Cooperative Extension Service (UW CES), many of which give the elevation ranges for each of the plants. These and other publications can be found at www.barnyard-sandbackyards.com/informational_resources.htm or by visiting your local UW CES office.



The U.S. Department of Agriculture Plant Hardiness zone map ranks zones of the United States based on average minimum temperature – with 1 being the coldest and 11 the warmest. Wyoming contains areas falling in zones 2a to 5a. A Wyoming zone map is shown at www.usna.usda.gov/Hardzone/ushzmap.html.

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