Bulbs are an essential and versatile component of any garden. Maximize their potential by selecting ones that return reliably year after year.

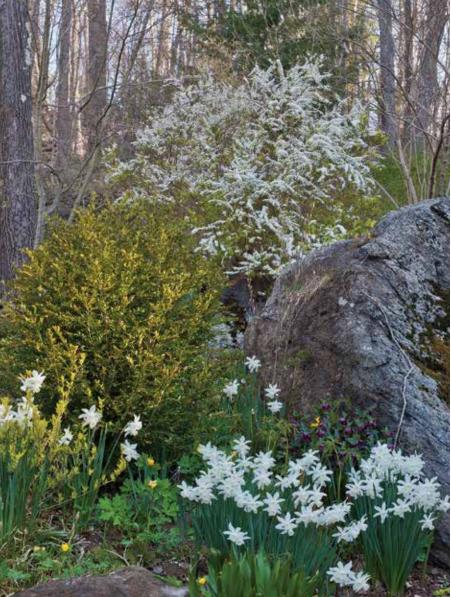
**▼**HE BEST surprise of the first spring in my new home in Connecticut many years ago was a mass of shaggy, fragrant daffodils that bloomed like crazy in a mountainside seep where they should have rotted. They were growing all over the neighborhood, but





I couldn't find them in any of my books or catalogs. Eventually I learned that my mystery daffodil was Narcissus 'Van Sion', (also known as 'Telamonius Plenus'), an heirloom cultivated since the 1600s. Twenty-five years later, they're still going strong. I appreciate such durable bulbs, which come up every spring, bloom with no effort on a gardener's part, and then quietly fade away as later-emerging perennials fill the space. That's what I call a bulb that lasts.

In my search for bulbs as forgiving as 'Van Sion', I managed to kill quite a few. Along the way, however, I learned to read between the lines of catalog prose; search the internet for subjects like "hardy bulbs for shade," "deer-proof bulbs," or even "poisonous bulbs;" pay attention to what



# Great Bulbs that Last BY KAREN BUSSOLINI

thrived in untended places; and apply a rudimentary knowledge of bulb biology.

## **UNDERSTANDING BULBS**

Before going any further, I need to clarify that I'm using the term "bulbs" loosely here to include corms, rhizomes, tubers, and other geophytes that store water and nutrients in swollen underground organs that allow them to go dormant during adverse seasons of either drought or cold, then re-grow when favorable conditions return. Some are widely adaptable, others have very specific requirements.

All bulbs must replenish food stores via photosynthesis, so it's important to leave their foliage in place until it dies back naturally. So repress the neatness gene; no trimming foliage, tying it in knots, or braiding it before it withers. Later-emerg-







Siberian squill, top, and Crocus tommasinianus, above, naturalize well in lawns.

ing plants can help conceal the unsightly dying-back process, but too much surrounding foliage can inhibit the process of replenishing bulb food reserves.

Bulbs also have different mechanisms for reproducing. Brent Heath of Brent and Becky's Bulbs in Gloucester, Virginia, points out the difference between naturalizersbulbs that reproduce by seed-and perennializers—those that persist and spread, like perennials, but don't set seed. "Many small bulbs such as Chionodoxa, Siberian squill (Scilla siberica), Scilla bifolia, and Crocus tommasinianus do wonderfully in lawns," says Heath, "but you have to allow the foliage and seeds to mature." This means cutting the grass no less than three to three-and-ahalf inches tall for six weeks or so, or letting it grow and then using a trimmer or mulch mower later. "And, of course, you can't apply herbicides or other chemical treatments to the grass," reminds Heath. (For a list of naturalizers and perennializers, see page 21).

The terms "naturalize" and "perennialize" are commonly used interchangeably, and in some cases bulbs use both mechanisms to spread. The experience of one of my neighbors with Siberian squill helped me understand the difference. For many years, the neighbor divided and replanted clumps of the tiny bulbs in the lawn, trying to create a blooming blue spring carpet. They spread slowly, producing a mass more akin to a bath mat than a carpet, despite having everything they needed winter cold, good drainage, and dry conditions during dormancy. It turns out that what they lacked in order to naturalize was enough time for the seed to ripen. Once the family began mowing the lawn later in the season, they seeded abundantly.

Of course, there's a fine line between naturalizing and invasiveness. Bulbs such as star of Bethlehem (Ornithogalum umbellatum), which spread rampantly and can escape into natural areas, should be avoided. Before purchasing bulbs, check state and national weed lists.

## MATCHING ORIGIN AND SITE

When selecting bulbs, it's important to pay attention to where they originate. "Americans still have a one-size-fits-all approach to plants," says Russell Stafford, owner of Odyssey Bulbs in South Lancaster, Massachusetts. "But plants have to match with garden conditions, so habitat has to be considered."

Stafford specializes in uncommon cold-hardy bulbs that he mostly propagates himself. "Bulbs are adapted to the climactic patterns (particularly of temperature and precipitation) that prevail in their native range. A montane bulb requires winter cold as much as a tropical native detests it." (See below for a chart matching climatic zones with U.S. regions.)

Stafford advises gardeners in areas with summer rainfall who attempt to grow bulbs from dry-summer areas to provide very well-drained soil; bulbs from summer-rainfall areas favor soils that remain moist in summer, so humus, mulch, compost, and summer watering are in order. In areas that face intense heat or cold, planting bulbs deeper than recommended and adding mulch helps insulate them from the extremes.

Clearly, the selection of bulbs that last varies depending on where you live. The following sections offer suggestions for different regions based on my own experience and that of experts in other parts of the country.

## CHOICES FOR THE NORTHEAST

Of course, the classic perennial bulb in most temperate regions is the daffodil. In my primarily woodland garden, I've had success with 'Van Sion' as well as smallish but sturdy daffodil cultivars such as 'Jetfire', 'Thalia', and 'Tête-à-Tête'. A season-spanning mix of daffodil cultivars such as 'Ice Follies', 'Spellbinder', 'February Gold', and 'Mount Hood' toughs it out in a wild area.

Other stalwarts include a variety of small bulbs with foliage that ripens before trees leaf out. These have persisted and in-



In the author's garden, 'Blue Danube' camassia thrives in soggy areas where other bulbs won't.

creased over the years without protection from deer or drastic measures involving hardware cloth or tilling sharp-edged rock products into the soil to deter rodents.

For instance, diminutive grape hyacinths (Muscari armeniacum) and "tom-

mies" (Crocus tommasinianus 'Barr's Purple') planted 20 years ago pop up delightfully early in the lawn and perennial beds, where their grasslike foliage dries up and disappears without a fuss. Species and close-to-wild tulips (Tulipa tarda, T. clusi-

Climactic Zones	Temperature		Precipitation		U.S. Rango
	Summer	Winter	Summer	Winter	
Montane	mild	frigid	varies	snowy	western mountains
Maritime	mild	cool/cold	rainy	rainy/snowy	coastal Northeast, Northwest coas
Continental	hot	cold	dry spells	snowy	eastern Midwest, mid-Atlantic
					interior Northeast, upper South
Continental	hot	frigid	droughty	dryish	western Midwest, Plains
Steppe	hot	cold	dry	snowy	interior Northwest, Great Basir
Mediterranean	hot/mild	mild/cool	dry	rainy	western California, interio
					Pacific Northwest coas
Subtropical	hot/mild	mild	rainy	rainy/dry	lower South
Tropical	hot/warm	warm	rainy	rainy/dry	southern Florida

ana 'Cynthia') nestle among deer-resistant herbs in a sunny bed, while Camassia leichtlinii 'Blue Danube' revels in a soggy spot where other bulbs won't grow.

Some of the most resilient came from generous fellow Connecticut gardeners who have conditions similar to my woodland garden. A shovelful of Allium zebdanense, a small graceful white-flowering ornamental onion, along with a handful of winter aconite (Eranthis hyemalis) and spring snowflakes (Leucojum vernum) have turned into thriving colonies. A few snowdrops (Galanthus nivalis) are now plentiful enough to share.

## **WEST COAST**

The longevity of daffodils and the small bulbs was a recurring theme with the experts I spoke with across the nation. Greg Graves, co-owner of Old Goat Farm and Nursery in Graham, Washington, recommends daffodils 'February Gold', 'Mount Hood', 'Thalia', and Narcissus poeticus var. recurvus.

Many bulbs originated in climates similar to the wet winter/dry summer of the Pacific coast, so Graves's list of great performers also includes Crocus tommasinianus, snowdrops (Galanthus nivalis and G. elwesii), grape hyacinths (Muscari armeniacum and M. latifolium), fritillarias (Fritillaria meleagris and F. michailovskyi), and species tulips (T. humilis and T. clusiana). Many of these spread readily in full sun or part shade. In deeper shade, he recommends dogtooth violets or trout lilies such as Erythronium dens-canis and the hybrid 'Pagoda'.

In the Pacific Northwest, hardiness seems to be less an issue for bulbs than free-draining soil. "It isn't cold that will kill them but rot from all the rain," says Graves. Thus exotic bulbs like the South African fall-blooming Nerine bowdenii 'Marny Rogerson' also do well in the right site.

In San Francisco, a perhaps surprising place to view hardy bulbs is Alcatraz Island, site of the notorious prison. Gardens cultivated on this rocky windswept island for 150 years were abandoned for 40 years until 2003, when the Garden Conservancy began restoring them. Project manager Shelagh Fritz recalls that as soon as the winter rains began, bulbs started popping up—leaves of "naked ladies" (Amaryllis belladonna) the and South African cornflag (Chasmanthe



Native to South Africa, watsonias thrive in regions with hot, dry summers.

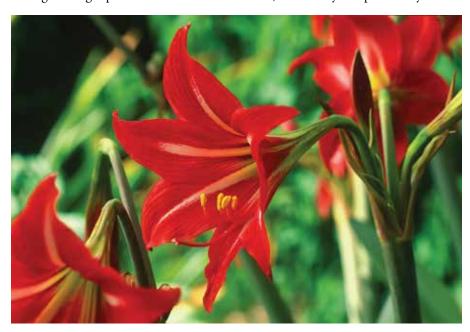
floribunda), then Cape tulip (Homeria collina). Squills (Scilla spp.), Iris reticulata, grape hyacinths (Muscari spp.), daffodils, snowdrops (Leucojum aestivum), and gladioli all appeared.

Southern California's hot dry summers nurture more exotic fare with a different schedule. In her Encinitas garden, dry-climate gardening expert Nan Sterman relies on slim, elegant species gladiolus-fragrant pale yellow Gladiolus tristis and spectacular magenta G. communis ssp. byzantinus. Watsonias (Watsonia pyramidata cultivars) easily increase, along with purple and magenta baboon flower (Babiana stricta) and spice-hued harlequin flower (Sparaxis tricolor). South African bulbs are planted in mid- to late summer, grow foliage in fall and winter, and bloom in spring. They don't need fertilizer but do require good drainage.

## SOUTH AND SOUTHWEST

Scott Ogden, author of the definitive Garden Bulbs for the South, says, "Any bulb you plant will either get stronger each year or be wasting away." In the humid Gulf South, he reports, those that do well are either cool-season bulbs such as Freesia laxa. Gladiolus communis ssp. byzantinus 'Cruentus', and Ipheion uniflorum, that take advantage of the South's relatively mild winters or, more commonly, warm-season growers from similar climates. Both groups have to tolerate the prevailing sandy or sticky clay soils.

"The wild narcissus such as N. jonquilla from southern France and Spain have naturalized in roadside ditches, and Lent lilies (N. pseudonarcissus) are taking over old pastures on acid soils," says Ogden, who splits time between homes in Austin, Texas, and Fort Collins, Colorado. "Paperwhites (N. papyraceus), Chinese sacred lilies (N. tazetta ssp. lacticolor) and their hybrids persist everywhere."



St. Joseph's lily proliferates in the heat and humidity of southern gardens.

Flamboyant, pest-free Amaryllis family bulbs rule in the South: Prolific St. Joseph's lily (Hippeastrum ×johnsonii) unfurls its crimson trumpets in mid-spring, heat-loving subtropical spider lilies (Hymenocallis spp.) and crinums in summer. "Crinums are indestructible," says Odgen. "Plunk them in the lawn, even mow them down, and when it rains they still pop up and bloom-then maybe get mowed down again. They often outlive the house they're planted by."

After summer or early fall thunderstorms, rain lilies (hybrids and forms derived from Zephyranthes candida, Z. grandiflora and Z. citrina and others) make "starry bouquets of pink, gold, copper, and cream that dance along the edges of paths and borders," says Ogden.Tenacious oxblood lilies (Rhodophiala bifida) and graceful red spider lilies (Lycoris radiata) paint landscapes scarlet in fall.

In the desert Southwest, 100-degree days and late-summer monsoons rot bulbs requiring dry conditions, and winter freezes kill tender ones, reports landscape designer and garden writer Scott Calhoun, who lives in Tucson, Arizona. Worth trying are early, cold-hardy Iris reticulata, which have proven themselves from Tucson to Santa Fe to Denver, and species tulips like *Tulipa clusi*ana. Summer-blooming native Texas rain lilies (Zephyranthes chlorosolen) and South American Z. candida take advantage of the water offered by low-desert monsoons.

## THE INTEMPERATE INTERIOR

Without the tempering effect of oceans, inland areas of the United States face greater extremes. Xeriscape pioneer Lauren Springer Ogden, gardening in dry Fort Collins, Colorado, is perched between mountains and semi-desert, a climate much like the cold winter/dry summer grasslands of the Eurasian steppes, where foxtail lilies (Eremurus spp.) and tulips originated. Other than hard-to-tame native bulbs, she's seen only grape hyacinths and foxtail lilies survive for more than a year or two without irrigation.

With the protective enclosure of a tall deer fence, she and her husband, Scott Ogden, have planted some 30,000 bulbs in their garden. Low-water successes receiving an inch of moisture per month from occasional summer rains and/or irrigation include irises (Iris reticulata and I. histrioides), crocuses (Crocus sieberi, C. chrysanthus, C. speciosus, and C. tommasinianus), Diche-



Dramatic displays of red spider lily (Lycoris radiata) are a common autumn sight in the south.

lostemma 'Pink Diamond', and gladiolus (G. communis and G. communis ssp. byzantinus).

Species tulips are the toughest, thriving if watered once a month in summer, twice a month in spring. Tulipa batalinii is super-strong, along with other small varieties like T. bakeri, T. clusiana, and T. humilis. Short, large-flowered, and early tulips such as T. greigii and T. kaufmannia lasted 15 years in Odgen's former "hellstrip" garden, watered only three or four times a year. Tulipa tarda, a modest self-sower elsewhere, is so weedy here it will choke out even tough buffalo grass.

Most alliums, except the giant ones, are champs, but Ogden warns, "You need to

## Sources

Brent and Becky's Bulbs, Gloucester, VA. (804) 693-3966.

www.brentandbeckybulbs.com.

John Scheepers, Inc., Bantam, CT. (800) 567-0838. www.johnscheepers.com. Odyssey Bulbs, South Lancaster, MA. (508) 335-8106. www.odysseybulbs.com. Old House Gardens, Ann Arbor, MI. (734) 995-1486. www.oldhousegardens.com. The Southern Bulb Company, Golden, TX. (888) 285-24867.

www.southernbulbs.com.

Telos Bulbs, Ferndale, CA. (707) 786-4985. www.telosrarebulbs.com.

## Resources

Bulbs for Garden Habitats by Judy Glattstein. Timber Press, Portland, Oregon, 2005. California Gardeners Guide, Vol. II by Nan Sterman. Cool Springs Press, Minneapolis, Minnesota, 2007.

Daffodils for American Gardens by Becky and Brent Heath. Bright Sky Press, Houston, Texas, 2001.

Garden Bulbs for the South (2nd Edition) by Scott Ogden. Timber Press, Portland, Oregon, 2007.

The Little Bulbs: A Tale of Two Gardens by Elizabeth Lawrence. Duke University Press, Durham, North Carolina, 1986.

The Pacific Bulb Society (PBS), www.pacificbulbsociety.org. PBS maintains a useful Wiki and online forum on bulbs.





deadhead or they come up like dog hair all over the place." She loves the silvery amethyst globes of Allium christophii, tall purple A. afflatunense and broad-leafed low A. karataviense, which seeds nicely and lasts a long time.

Bulbs that persist with an inch of water every seven to 10 days from spring through fall include snowdrops, squill, Puschkinia scilloides, Anemone blanda (especially blue forms), Iris bucharica, Hyacinthus amethystina, and Martagon lilies. Daffodils, Ogden explains, can't be used in true xeriscapes, because you need to water them once a Species tulips, such as Tulipa batalinii, above, in this garden designed by Lauren Springer Ogden, and many alliums such as Allium karataviense, left, do well in xeriscapes.

week. With regular water, her favorites for getting better over time include 'February Gold', 'Jetfire', 'Segovia', 'Sweetness', 'Kokopelli', 'Actaea', and 'Sundisc'.

Jill Selinger teaches the hardy bulbs certificate course at the Chicago Botanic Garden in Glencoe, Illinois, where the challenge for plants is wide temperature swings. "Almost all narcissus will perennialize beautifully here," she says. Scilla siberica will "spit themselves around." Milk squill (Scilla mischtschenkoana), along with Spanish bluebells (Hyacinthoides hispanica), are "almost too aggressive in a small city garden, but they will fill in a big area and make a good show pretty quickly."

Less rampant reliables include glory of the snow (Chionodoxa luciliae), Puschkinia scilloides, and Muscari armeniacum. Ornamental onions, especially diminutive Allium moly, "are great with grasses-planted in a sunny prairie, you don't notice as their foliage fades away," says Selinger. Western native camassias, such as Camassia leichtlinii and C. cusickii, bloom "after the onslaught of spring bulbs." Species tulips like Tulipa tarda and T. turkestanica naturalize and are less likely to be dug by squirrels once they're established.

# **SUITING THE LOCATION**

The following naturalizers and perennializers are recommended by Brent Heath to suit various growing conditions.

## ESPECIALLY FOR THE SOUTHEAST

Grape hyacinths (Muscari armeniacum, M. neglectum) Winter aconites (Eranthis hyemalis)

Star flowers (Ipheon uniflorum)

#### FOR WET AREAS

Guinea hen flower (Fritillaria meleagris) Summer snowflake

(Leucojum aestivum)

## **MOIST SHADE**

Allium triquetrum English bluebells (Hyacinthoides non-scripta) prefers cooler summers; Spanish bluebells (H. hispanica) are better in the Southeast

Snowdrops (Galanthus nivalis)

## **DRY SHADE**

Cyclamen hederifolium Squill (Scilla siberica, S. bifolia, S. mischtschenkoana) are best in cold climates

### **DRY SUN**

Allium flavum Allium moly Species tulips (T. tarda, T. sylvestris, T. batalinii)

## RELIABLE PERENNIALIZERS

Daffodils (Narcissus cultivars) Ipheion uniflorum 'Rolf Fiedler' Leucojum aestivum 'Gravetye Giant'

## OBSERVATION, ADVICE, AND EXPERIENCE

As the recommendations of these gardeners from different regions show, there are countless garden-worthy, long-lasting bulbs out there. Every garden has niches for carefree colorful bulbs that bloom and disappear, but happily reappear year after year. In addition to trying some of the bulbs covered in this article, take note of what succeeds for your neighbors and in local botanical gardens and go from there. Fall is the perfect time to plant some new bulbs that will yield a huge payoff for many years to come.

Karen Bussolini is a garden speaker, photographer, writer, and eco-friendly garden coach based in Connecticut.