



versatile and water-thrifty Buckwheats

BY CAROL BORNSTEIN

Buckwheats (*Eriogonum* spp.) are a large and diverse genus of American natives prized for their drought tolerance, wildlife value, and long season of interest.

WITH INTEREST in sustainable landscaping on the rise, gardeners nationwide are looking for plants that will thrive with minimal care. In regions where water scarcity is the norm, plants that can tolerate extended dry periods are becoming increasingly popular. Succulents are one such group. Another is buckwheats (*Eriogonum* spp.), a genus of water-thrifty

North American natives whose delicate beauty often overshadows their utility in the dry garden.

“Eriogonums are the equal of penstemons as landscape plants in western states,” says Panayoti Kelaidis, senior curator at Denver Botanic Gardens. “These two genera are the backbone of native gardens in this region and are absolutely essential to any serious practitioner of ‘xeriscape.’”

The two dozen or so perennial species currently available through the nursery industry are useful for erosion control, edging, groundcovers, informal hedges, or focal points. Their billowy shapes work best in informal gardens, serving equally well in rock gardens, mixed borders, meadow and prairie gardens, or containers. The diminutive alpine species are particularly suited for trough gardens.

The rosy pink flowers of *Eriogonum grande* var. *rubescens* spill gracefully over rocks, alongside *Leymus condensatus* 'Canyon Prince'.

RUGGED BEAUTIES

Eriogonum is a diverse genus that includes roughly 250 species of annuals, perennials, and shrubs. Approximately one-third of these are uncommon to rare in the wild. They range from prostrate, cushion-forming mats to eight-foot-tall shrubs. Buckwheats are found throughout the western states as well as south into Mexico and north into Canada, along with a few locations in the eastern United States. California is home to about 125 species, including many of the ones that have already become fairly well established in the nursery trade. Other species can sometimes be acquired through seed exchanges and native plant sales.

Buckwheats typically grow in dry, sun-drenched, rocky sites and can be found clinging to wind-whipped ocean bluffs, cascading down steep chaparral slopes, or carpeting mountain ridge tops. Some species prefer the dry, dappled shade beneath pine and oak trees. Virtually all of them grow best in well-drained rocky or sandy soils with low fertility—conditions in which more traditional garden ornamentals tend to struggle.

Buckwheats offer year-round ornamental interest, something that West Coast gardeners in particular can appreciate due to the region's exceptionally long growing season. Several species flower in summer and fall, providing welcome color

and texture at a time of year when most native plants have long finished blooming in western gardens. "Even out of bloom, they are nearly always interesting in form and foliage, and some are truly spectacular," notes Nevin Smith, director of horticulture at Suncrest Nurseries in Watsonville, California. Foliage color varies from silvery-white to bright green and, for some species, turns dark purple or maroon in winter.

It is their inflorescences, however, that truly sets buckwheats apart. Masses of tiny white, cream, yellow, or pink to red flowers are borne in wandlike spikes, dense heads, or flattened and intricately branched sprays. The display lasts for

FLOWER OR FLOUR?

Those unfamiliar with the genus *Eriogonum* may wonder if these North American plants are related to the Asian buckwheat (*Fagopyrum esculentum*), whose seeds are ground into flour used for pancakes, noodles, and other foodstuffs. The connection is that both genera belong to the knotweed or buckwheat family (Polygonaceae), along with plants such as rhubarb (*Rheum rhabarbarum*) and sorrel (*Rumex* spp.).

Several Native American tribes are known to use *Eriogonum* flowers, seeds, stems, and leaves for food, but overall the American buckwheats are valued more for their medicinal and ornamental properties than their culinary ones. —C.B.

months as the flowers age to deep pink, rusty red, cinnamon, chocolate-brown, or dark yellow. "I like using them for rusty fall color in the same manner as *Sedum* 'Autumn Joy,'" says Susan Van Atta, a landscape architect based in Santa Barbara, California. As a bonus, the dried inflorescences of many species retain their shape and color for years in floral arrangements.

Buckwheats also provide valuable wildlife habitat. Their flowers and foliage are an important food source for bees, butterflies, and other beneficial insects. Birds and mammals eat the seeds and enjoy the shrub's protective cover. David Salzman, owner of High Country Gardens nursery



From early summer's creamy white to autumn's reddish brown, the delicate flowers of St. Catherine's lace (*Eriogonum giganteum*) provide a spectacular, long-lasting show.

in Santa Fe, New Mexico, calls them “an essential bee plant.”

To pick the best buckwheats for your garden, look to their natural habitats for valuable clues about their horticultural requirements, potential uses, and possible companions. Unless your garden is governed by shade, you should be able to successfully grow at least one or more of the buckwheats discussed in this article, depending upon your climate zone.

CALIFORNIA'S CHANNEL ISLANDS

The Channel Islands, located off the coast of southern California, are home to many outstanding native plants that have become garden favorites, including several buckwheat species. Among these is St. Catherine's lace (*E. giganteum*). Everything about this simultaneously delicate yet bold-textured plant is impressive. Plants quickly reach five to six feet tall and may extend even wider, bearing oval leaves that are gray-green on top and silver-gray below. By early summer, a lacy veil of creamy white flowers hovers above the foliage. These dome-shaped, two-foot-wide inflorescences eventually darken to warm reddish-brown. Judicious pruning of older plants reinforces their sculptural character. St. Catherine's lace makes a striking focal point and is useful as an informal hedge or backdrop in a dry border. Ron Lutsko, a San Francisco-based landscape architect, likes combining it with the lime green foliage of coyote bush (*Baccharis pilularis*).

More modest than St. Catherine's lace in every way, Santa Cruz Island buckwheat (*E. arborescens*) grows two to five feet tall and wide, has narrow, sage-green leaves, and smaller, yarrowlike clusters of cream to pale pink flowers in spring and summer. Some plants become treelike with age, their crooked branches and roughened bark adding textural interest. Try using this elegant shrub near a rugged boulder or weave several plants through an informal mixed border.

For a more vibrant splash of color, red-flowered buckwheat (*E. grande* var. *rubescens*) is an excellent choice. This diminutive, loosely mounded subshrub typically grows one to two feet tall and wide on coastal bluffs and rocky slopes on several islands. The rounded, wavy leaves are gray-green on top and downy white below. Its frothy, soft pink to deep rose

flowers add zing to rock gardens or the front of a mixed border from spring through early summer. Unlike other species, the flowers quickly fall apart upon turning brown. If you're lucky, some seeds will germinate to replace this relatively short-lived plant.

CALIFORNIA MAINLAND

Gardening in exposed areas near the ocean is challenging due to the seemingly constant influx of salt-laden air and buffeting winds. Many plants have adapted to this harsh environment, including the aforementioned island endemics and these buckwheat species from the California mainland.

Coast buckwheat (*E. latifolium*) is the mainland counterpart to red-flowered buckwheat. At one time, botanists considered these to be the same species and as far as horticulturists are concerned, they fulfill the same function in the garden. Coast buckwheat differs in having grayer foliage and more tightly compact flower heads that bloom in summer and fall. The pomponlike clusters are usually creamy white or light pink; deep pink forms are occasionally available.

California buckwheat (*E. fasciculatum*) is the most widespread shrubby species in the genus, extending beyond the state's borders into Baja California, Utah, Nevada, and Arizona. Occurring from the coast



A good choice for borders or rock gardens, *Eriogonum arborescens* develops an interesting, irregular form and produces cream to pale pink flowers in spring and summer.

Ashyleaf buckwheat (*E. cinereum*) is a rather understated shrub. Its rounded, light gray leaves and billowing shape blend easily with other xeric plants in the dry garden. Individual plants reach up to three feet tall and can sprawl several feet across. Large colonies spilling down steep slopes in the wild indicate this plant's exceptional erosion control capabilities. Small heads of cream to light pink flowers dot the slender, branched flower stalks in late summer and well into fall, providing months of cool color in this hot season.

to inland deserts, this durable native has a tendency to accumulate dead twigs and leaves over time, so gardeners living in high-fire zones should avoid planting this species. Periodically cutting back older plants to ground level removes this tinder and stimulates a surge of new growth from the base. California buckwheat is a variable shrub, with upright forms reaching three to four feet tall and arching forms sprawling several feet across as their branch tips take root. The latter form has yielded a number of selections—including 'War-riner Lytle', 'Bruce Dickinson', 'Theodore



Above: The loose, silvery gray foliage of Wright's buckwheat surrounds the golden blooms of saffron buckwheat. Right: California buckwheat blooms from spring through late summer or fall.

Payne', and 'Dana Point'—valued as groundcovers. The needlelike, green to gray-green leaves are superficially similar to rosemary, but the resemblance ends once the creamy white flowers emerge. Plants can bloom from spring through summer and even into fall before turning copper or deep brown. Beekeepers especially prize this common buckwheat for the flavorful honey it yields.

Saffron or Conejo buckwheat (*E. crocatum*) is one of California's rarer buckwheats, occurring in a narrow area within the Santa Monica Mountains. A stunning foliage plant, this silvery subshrub forms mounds one to two feet tall and up to three feet wide. Soft white hairs coat the rounded, wavy leaves and flower stalks that begin to elongate in spring. The rust-colored buds give way to vivid yellow flowers that eventually ripen into chocolate-brown seed heads. Provided with



sharp drainage and full sun, saffron buckwheat is a beautiful informal addition to rock gardens, dry borders, containers, or as a low hedge in knot gardens.

FOR COLDER CLIMES

Gardeners in colder regions of the country, including high-elevation locations in California, have an ever-expanding palette of hardy buckwheats to cultivate. One of the most popular is sulfur buckwheat (*E. umbellatum*), a variable species

Resources

Alpine Plants of North America: An Encyclopedia of Mountain Flowers from the Rockies to Alaska by Graham Nicholls. Timber Press, Portland, Oregon, 2002.

California Native Plants for the Garden by Carol Bornstein, David Fross, and Bart O'Brien. Cachuma Press, Los Olivos, California, 2005.

Eriogonum Plant Society

(www.eriogonum.org). Members of this new society have access to educational programs and an annual seed exchange.

High and Dry: Gardening with Cold-Hardy Dryland Plants

by Robert Nold. Timber Press, Portland, Oregon, 2008.

Native Treasures by M. Nevin Smith. University of California Press, Berkeley, California, 2006.

North American Rock Garden Society

(www.nargs.org). Members receive the Rock Garden Quarterly and have access to their annual seed exchange.

Sources

Annie's Annuals, Richmond, CA. (888) 266-4370. www.anniesannuals.com.

High Country Gardens, Santa Fe, NM. (800) 925-9387.

www.highcountrygardens.com.

Jelitto Perennial Seeds, Louisville, KY. (502) 895-0807.

www.jelitto.com.

Larner Seeds, Bolinas, CA. (415) 868-9407. www.larnerseeds.com.

Siskiyou Rare Plant Nursery, Talent, OR. (541) 535-7103.

www.siskiyourareplantnursery.com.

found throughout the mountains of northern California and into Oregon, Colorado, and Utah. Kelaidis calls this species the workhorse of the genus. Plants range in size from prostrate mats to 18-inch-high mounds and can spread up to three feet across. The evergreen to semi-evergreen foliage varies from sage-green to gray-green and may turn purple or bronze-red in winter. The spring or summer-blooming flowers span the spectrum of yellows.

Several varieties and selections are recommended, including *E. umbellatum* var. *aureum* ‘Kannah Creek’, a groundcover with bright green leaves and huge yellow umbels that age to bronze-orange in the late summer to early fall. Another, *E. umbellatum* var. *porteri* from central Utah, is a subalpine coveted by rock gardeners for its mat-forming habit, shiny green foliage that blushes to dark bronze in winter, and brilliant yellow flowers that turn orange and scarlet as they age. For those partial to gray foliage, *E. umbellatum* var. *humistratum* is another excellent performer. ‘Shasta Sulphur’ is a densely mounded, yellow-flowered cultivar that performs reliably throughout California, whereas ‘Alturas Red’ is a more diminutive selection with white flowers that quickly turn red.



Eriogonum umbellatum var. *aureum* ‘Kannah Creek’ makes a colorful groundcover with its bright yellow blooms that age to deep orange in late summer and early fall.

Wright’s buckwheat (*E. wrightii*) is another highly variable montane species whose range encompasses Southern California and parts of Nevada, Arizona, New Mexico, and Texas. The small, linear leaves are lightly felted, lending a silvery-gray sheen to the matted or loosely upright plants. Tiny clusters of white to pink flowers punctuate the wiry stalks in summer and fall. These potentially long-lived plants are perfect for rock or trough gardens. Closely related and similar in many respects is the pancake-flat Kennedy’s buckwheat (*E. kennedyi*), whose flowers bloom in summer in clusters on unbranched stalks. Older plants may carry hundreds of tiny rosettes.

OTHER BUCKWHEATS

The diversity of buckwheat species and cultivars available to gardeners continues to climb, thanks to adventurous growers and collectors. Crispleaf buckwheat (*Eriogonum corymbosum*), for example, occurs in several western states and typically produces clouds of white, pink, and occasionally yellow flowers in summer. ‘Henrieville Yellow’, a yellow-flowered variety from Utah, was recently introduced. Its showy, staticelike sprays, com-

bined with its carefree nature and tolerance of modest irrigation, are garnering rave reviews.



Small pink flower clusters of *Eriogonum wrightii* appear above felted foliage.

Shale barrens buckwheat (*E. allenii*), is one of the few species native to the eastern United States. This rare perennial occurs on rocky slopes in oak and pine woodlands in the Appalachians of Virginia and West Virginia. The broadly oval leaves are sage-green above and covered with soft, brownish-white hairs below. This handsome foliage is upstaged in late summer by the splendid, dome-shaped inflorescences of yellow flowers. Despite its rare status in the wild, it is quite adaptable and durable in cultivation. Look for the recently named seed strain ‘Little Rascal’.

Dogtongue or sandhill wild buckwheat (*E. tomentosum*) grows in sandy soils in woodlands and grasslands of Florida, Georgia, Alabama, and the Carolinas. Although rarely cultivated, this buckwheat holds the distinction of being the first species to be called *Eriogonum*, or “woolly knees” in Greek, a reference to the swollen, hairy nodes on the stem. Depending upon future garden trends, this delicate beauty, whose white flowers bloom in late summer and fall, might just find a wider audience.

MORE BUCKWHEATS TO CONSIDER

Botanical/ Common Name	Height/Spread (inches)	Ornamental Characteristics	Native Range
<i>Eriogonum caespitosum</i> (matted buckwheat)	1-4/8-30	dense mat of white felted leaves, yellow to red flowers	western U.S.
<i>E. compositum</i> (arrowleaf buckwheat)	8-30/10-15	cream to yellow umbels, sage-green leaves	western U.S.
<i>E. douglasii</i> (Douglas' buckwheat)	1-4/2-16	dense mat of whitish leaves, yellow flowers	western U.S.
<i>E. elongatum</i> (longstem buckwheat)	24-72/12-24	pink-tinged white flowers on wandlike, leafy stems	California to Baja
<i>E. gracilipes</i> (White Mountain buckwheat)	2-4/2-26	mat of white felted leaves, white to rose flowers in pompon heads	White Mountains of California and Nevada
<i>E. jamesii</i> (James' buckwheat)	2-10/12-60	mat of sage-green to gray leaves, white to yellow flowers	southwestern U.S. to Mexico
<i>E. lobbii</i> (Lobb's buckwheat)	1-6/2-16	cushion of rounded gray leaves and white to rose flowers in pompon heads	California, Oregon, Nevada
<i>E. nudum</i> (naked buckwheat)	4-60/2-12	broad, somewhat hairy leaves and white to yellow flowers on long, forked stems	western U.S. to northwestern Mexico
<i>E. parvifolium</i> (seacliff buckwheat)	12-40/20-80	matted to sprawling shrub with green leaves, white to pink or greenish-yellow flowers	coastal central and southern California
<i>E. saxatile</i> (hoary buckwheat)	4-8/2-8	loose clusters of silvery-white leaves, white to rose or pale yellow flowers	California and Nevada
<i>E. sphaerocephalum</i> (rock buckwheat)	2-16/12-24	open mats with downy leaves, yellow flowers in rounded heads	western U.S.
<i>E. thymoides</i> (thymeleaf buckwheat)	2-8/4-12	narrow, silky leaves, white to yellow flowers, low shrubby plants become gnarled with age	Washington, Oregon, Idaho

CARING FOR BUCKWHEATS

Buckwheats are practically care-free plants in the garden. An inch or two of gravel or pine needle mulch will keep their crowns dry; avoid humus-rich materials that retain too much moisture. Anne Spiegel, who grows several western species in her LaGrange, New York, garden, notes that good air circulation during the hot, humid summer months is also important in the eastern United States.

Few pests bother buckwheats. A strong pulse of water will dislodge aphids that occasionally congregate on the new leaves or flower buds. Deer and rabbits may nibble the tender young tips. Powdery mildew can be troublesome, but adequate sunlight and good air circulation should keep this disease in check.

Buckwheats rarely need pruning other than the removal of broken branches or spent flower stalks. As plants become leggy with age, rejuvenate them by pruning back to pencil-diameter wood. This technique isn't always reliable, so eventual replacement

may be necessary. Fortunately, many species freely self-sow without becoming weedy, adding a touch of spontane-



Although rare in the wild, *Eriogonum allenii* is quite adaptable in cultivation.

ity to a garden composition. However, it's important to note that if your garden is adjacent to natural areas, there is potential for buckwheats to escape cultivation or hybridize with indigenous species, risking contamination of the local gene pool. In that case, it is best to avoid these problems by planting locally native species.

PROMISING POTENTIAL

Once beguiled by buckwheats, few gardeners can settle for growing just one kind. In addition to the ones profiled here, there are at least a dozen other commercially available *Eriogonum* species to further tempt us (see chart above). So make room for some beautiful, carefree buckwheats in your water-thrifty garden.

Carol Bornstein is a horticulturist and author based in Santa Barbara, California. Her most recent book is Reimagining the California Lawn: Water-conserving Plants, Practices, and Designs (Cachuma Press, 2011).