

Be a Partner in Tahoe Conservation Landscaping

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Birds, Bees and Beardtongues?

On our mountain ridges and in our meadows (and, hopefully, our gardens) summer is painting its colors across the Tahoe landscape. We move through purples and scarlets, pinks and yellows as the wildflowers blossom. But among this colorful crowd none are so diverse as the penstemons.

Consisting of nearly 300 elegant species, penstemon is the largest wildflower genus found exclusively on the North American continent. Their size and appearance vary from low and bushy to slender and tall, and exhibit a wide range of leaf, blossom and stem structures. Still, they're easy to spot once you know a few of the genus' distinct characteristics.

Foremost, all penstemons have a fifth sterile stamen, sometimes fuzzy—hence their common nickname, beardtongue—sometimes smooth. The blossoms of most penstemons also have a tubular, tubular-funnel or tubular-bell shape in racemes or panicles. Their primary pollinators—bees and hummingbirds—are attracted both to this distinctive shape and to their bright colors.

If you're hoping to find wild penstemons, choose one of the nearby hills or meadows for your next hike. Penstemons are typically adapted by species to thrive in specific habitats ranging from low, open landscapes to forest clearings and exposed mountain tops. There are eight penstemon species in the Tahoe Basin: azure (*P. azureus*), Davidson's (*P. davidsonii*), hot rock (*P. deustus*), slender (*P. gracilentus*), mountain pride (*P. newberryi*), gay (*P. roezlii*), meadow (*P. rydbergii*), and showy (*P. speciosus*).

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Penstemon gracilentus

US Dept of the Interior



Penstemon speciosus

Las Pilitas Nursery



Penstemon davidsonii

Laporte Avenue Nursery



Penstemon rydbergii

Wild Ginger Farm Copyright

Upcoming Events

August 23rd,
Green Thumb Series, Tahoe
City Historic Fish Hatchery,
5:30pm - 6:45pm

August 24th,
Green Thumb Series, LT
Demonstration Garden,
5:30pm - 6:45pm

August 30th,
Green Thumb Series, Tahoe
City Historic Fish Hatchery,
5:30pm - 6:45pm

August 31st,
Green Thumb Series, LT
Demonstration Garden,
5:30pm - 6:45pm

September 25th,
Autumn Fest,
LT Demonstration Garden,
11am-3pm

FOR MORE INFORMATION ON
ALL OF THE EVENTS VISIT:
www.TahoeRCD.org

Volunteer?

The Tahoe RCD is looking for volunteers to help out with planting, weeding, and new developments in our demonstration gardens. If you or a group are interested, contact us at 530-543-1501 ext. 113 or info@tahoercd.org



As its name suggests, the meadow penstemon is the water-loving variety among the Tahoe penstemons and is found in moist meadows. The US Forest Service meadow area off of the bike path to Pope Beach is a good bet for meadow penstemons. At the opposite end of the spectrum, the Davidson's and showy penstemons thrive in exposed areas on sandy to rocky slopes and peaks. You're likely to find these species in high alpine areas. All the remaining varieties can be found in areas ranging from dry to rocky and semi-protected slopes, to forest openings and roadsides, typically favoring drier soils.



Penstemon newberryi: Mountain Pride

Penstemons are wild plants but like many of our native Tahoe wildflowers, they can thrive in your own yard. Penstemons make an excellent addition to gardens; not only do they produce a beautiful floral rainbow and provide habitat for pollinators, they are also low-maintenance! The American Penstemon Society—a fantastic resource for all things penstemon—recommends starting from seedlings rather than seeds for beginners. Fortunately, cultivated penstemons are easy to come by through several nurseries in the Basin including our partners, Aspen Hollow Nursery and Tahoe Outdoor Living. Collecting wild specimens is not recommended; the root systems of established penstemons do not survive digging and in many places the collection of seeds is illegal or requires a special permit.

Though penstemons are easy to care for in gardens, they still require conditions similar to those in the wild. Larger cultivars grow well planted in a garden border in fertile, well-drained soil in full sun or partial shade.



Penstemon azureus: Azure Penstemon

Shrubby or dwarf varieties grow best in rock gardens or at the front of borders in full sun and strongly prefer poor to moderately fertile soils that drain very well. Not all hybrid cultivars are hardy in Tahoe, however; be sure to choose a variety that is winter hardy to -20°F.

Whether in our gardens or wild mountain backyard, penstemons are a special and valuable part of Tahoe's landscape. After the long winter they brighten and color summer days, benefiting wildlife and humans alike. Let's protect our Tahoe penstemons—by enjoying and respecting them in the wild and by nurturing them in our gardens!

Thank You Volunteers!

The Tahoe Resource Conservation District has been busy working in the Angora Community Garden (Evans Family Garden), located at 1383 Mt. Olympia Circle in South Lake Tahoe, and the Lake Tahoe Demonstration Garden at the Lake Tahoe Community College.

On July 14th and 28th the Tahoe RCD partnered with the American River Conservancy and their Epic Sierra Adventures groups. Two groups of twelve high school students from around the world came to complete service learning projects in the two gardens. This energetic group of volunteers spent the morning planting ground covers, pulling weeds, mulching and



American River Conservancy volunteers

creating paths and common areas at the Angora Community Garden. After a bust morning everyone headed to the Lake Tahoe Demonstration Garden to repair a rock lined swale to improve water quality and did some general maintenance of the garden. This was a great opportunity

for the students to learn about the Lake Tahoe environment, forest health and gardening.

The Tahoe RCD was impressed by how much this group was able to get accomplished in such a short amount of time. We plan to work with another wonderful group from Epic Sierra Adventures next year! To learn more about Epic Sierra Adventures, visit their website:

<http://www.epicsierra.org>.

Another special thank you to the members of the South Lake Tahoe Garden Club for their hard work on July 12th removing debris and clearing pathways.

~ From All Tahoe RCD Staff

Reduce Your Use:

Residential Irrigation Efficiency Rebate Program

Contributed by: South Tahoe Public Utility District

Since more than 50 percent of residential water use takes place outdoors, water efficient gardens and landscapes translate into significant water savings. It is possible to have beautiful gardens and landscapes and still be water efficient. The South Tahoe Public Utility District is offering up to a \$400 rebate to encourage residents to use water wisely in your home landscaping by upgrading to a more efficient irrigation system.

What is Irrigation Efficiency?

Irrigation efficiency is a critical measure of irrigation performance in terms of the water required to irrigate a landscape. It can be defined in terms of a) system performance, b) the uniformity of the water application, and c) the response of the landscape to the irrigation. Having an efficient system is better for the landscape and saves water. Irrigation systems/equipment that are poorly designed, inefficient or not maintained reduces the degree of control over the water application.

What is the purpose of the Residential Irrigation Efficiency (RIE) Rebate Program?

The RIE program was developed to help customers upgrade their irrigation systems to make them more efficient. Examples of efficiency improvements can include replacement of existing systems with alternatives such as:

- low volume drip irrigation system;
- high distribution uniformity or multi-stream nozzles with a flow rate of 1.20 inches per hour (In/h);
- pressure regulators for optimal system performance;
- check valves or low lying sprinklers at the bottom of a slope to stop excess drainage.

To request a free landscape water efficiency evaluation or obtain advice on Tahoe friendly landscaping practices, contact the Tahoe RCD, www.TahoeRCD.org, 530.543.1501 ext 113

What does the rebate cover?

The program offers a rebate of up to \$400 which covers 50% of the irrigation equipment cost and 25% of the labor to install it. Itemized receipts are required. Eligible irrigation equipment includes equipment that improves irrigation efficiencies as determined by a South Tahoe PUD representative.

Efficiencies may include:

- Drip irrigation systems
- Replacing mis-matched sprinkler heads with like-kind heads
- Water pressure regulating devices
- Check valves
- Low precipitation, high distribution uniformity or multi stream rotating nozzles
- Rain shut off devices, moisture sensor or smart controllers

How do I know if the parts are eligible for the RIE Program?

Eligible parts are those that reduce water use in the landscape by operating at a lower volume, have a more uniform spray pattern or have high distribution uniformity.



Water efficient drip irrigation

Common types are:

- Precision nozzles: Spray nozzles that distribute < 1.20 inches per hour, high efficiency- variable arc (HE-VAN) nozzles
- Drip irrigation systems: each emitter distributes < 2.5 gallons per hour
- Micro-sprays: each micro-spray distributes < 2.5 gallons per hour
- In- Line irrigation systems: drip line to distribute water at < 1.0 gallon per hour per built in emitter.
- Multi-stream rotating nozzles: nozzles that distribute < .92 inches per hour

For more information or to obtain an application contact Sarah Jones, Water Conservation Specialist at 530-543-6268, sjones@stpud.dst.ca.us.

South Tahoe PUD: Right Way - Right Day

- Homes with addresses ending in an even number, water on Monday, Wednesday, and Friday.
- Homes with addresses ending in an odd number, water on Tuesday, Thursday, and Sunday.
- Do not hose driveways, decks, or other impervious surfaces. Use a broom instead.
- Hand-watering, with an automatic shut-off nozzle attached to the hose, is acceptable at any time.
- Exemptions exist for those installing TRPA BMPs, however, you must call the district to request an exemption.
- No landscape irrigation on Saturday. It is our peak demand day.
- Drip and low flow irrigation systems are exempt from designated watering days.

For information on South Tahoe PUD's water conservation programs contact 530.543.6268
www.stpud.us

Join Us! 2011 Conservation Landscape Tour

The Tahoe Resource Conservation District is hosting the 4th Annual Conservation Landscape Tour on Sunday, August 21st from 1pm-5pm. Come enjoy and explore eight beautiful gardens in the Montgomery Estates area that highlight Tahoe Basin conservation techniques. This FREE tour highlights native and

adapted plant selection, water conservation techniques, defensible space methods, Best Management Practice (BMP) demonstrations and wildlife enhancement features. The tour ends at the Lake Tahoe Demonstration Garden at the Lake Tahoe Community College.



Garden enthusiasts at Tahoe RCD's 2010 Conservation Landscape Tour

available to answer your questions related to the conservation landscapes and plant identification.

Pick up your tour map between 1pm-3pm from Sierra House Elementary School. The gardens are nearby and we encourage carpooling, bicycling or walking. Music and light refreshments at last stop from 2-5pm. Please leave your pets at home. For more information, contact Courtney at 530-543-1501 ext. 118 or visit www.tahoercd.org/connect



Garden showcasing an elegant water feature

Last year's event brought together over 150 Tahoe residents to enjoy a delightful summer afternoon learning about water efficient irrigation techniques and examples of defensible space through proper plant selection, arrangement and management. As you explore the gardens, garden stewards and homeowners will be

Sweep Broom Out of Your Yard

Don't be fooled by this seemingly innocent ornamental plant! It can escape from your garden beds and invade adjacent areas, expanding rapidly and forcing out native plants. It also grows in dense patches, creating a huge fire hazard.



Scotch broom has a pea-like flower

Scotch broom is native to central and southern Europe. It is believed that the stems of the plant were used to make brooms. Scotch broom was introduced to the United States for use as an ornamental and later to control erosion and stabilize coastal dunes. It soon escaped cultivation and by 1985 had infested an estimated 600,000 acres in California alone.

Today, it has become firmly established as an invasive weed. Invasive weeds displace native plants, decrease wildlife habitat, alter normal ecological processes, reduce recreational values and uses and cost us millions of dollars each year in treatment costs, decreased land productivity, and decreased land value. The coarse root structure of broom plants fails to stabilize soil, resulting in increased erosion and stream sedimentation, which can damage Lake Tahoe's famed, clear water.



Large mounds of Scotch broom in a Tahoe planter bed

Scotch broom can grow in pastures, fields, grasslands, forests and gardens. Typically it is found growing along roadsides where soils are frequently disturbed, dry, sandy and full sunlight is available. A single mature Scotch broom plant can produce about 15,000 seeds per year, about 40% of which will sprout in the first year!

If you think you may have this plant in your yard, contact the Tahoe RCD for our free invasive plant identification and removal services at 530-543-1501 ext 113 or contact@TahoerCD.org.

Thanks to Green Thumb Presenters and Participants

The Green Thumb Gardening presentations have been full of useful information this summer. Many thanks to our presenters who have taken time out of their busy summer schedules to share their knowledge and experience with Lake Tahoe gardeners. Many of the presenters volunteered their time to prepare and present. Special thanks to these dedicated community members: Anna McLeod, Fiona Cowan, Albert Stevensen, Sharon Buss, Kevin Marini, Mimi Kimoto, Lesley Higgins, Kit Veerkamp and Kathy Maston. I'd also like to thank our gardening community for participating in this program and enriching the discussions with your questions and your personal experience. Lastly, a big thanks to Lake Tahoe Community College and UC Davis for sharing their beautiful demonstration gardens to be used as our outdoor classrooms.

AUTUMN FEST

SUNDAY
SEPT 25TH
11-3PM




Lake Tahoe Demonstration Garden
@ One College Drive, South Lake Tahoe

Presentations Featuring Alicia Funk (author of *Living Wild*), and Vermiculture with "Mr. Soil" Craig Witt

Live Music, Pumpkins, Storytelling, Dance Performances, Local Artists, Kids Activities, and Much More!



Silent Auction Sponsored by:  Outdoor GEAR LAB

For More Info: www.TahoeRCD.org
(530) 543-1501 x 127, info@tahoercd.org

Test Your Garden Savvy!

Our last edition focused on spring-cleaning and irrigation tips for your yard and garden; we hope you were able to put some of those into action! Stretch your memory and Tahoe gardening know-how in our quiz below.

Hint: you can find all the answers in the Spring edition.

1. To avoid a garden nibbled down to the nubbins by rabbits, what native and Tahoe-adapted species can you plant that are less likely to be eaten by garden pests?
2. Why are over-watering and over-fertilizing particularly harmful in Tahoe soils?
3. What is the minimum buffer zone distance you should allow between fertilized areas and stream environments?
4. How can mulching after spring cleaning benefit your landscape?
5. How do excess nutrients affect Lake Tahoe's water quality?
6. Are residents who are installing BMPs exempt from South Tahoe PUD watering regulations?

ANSWERS

1. Pentstemon, columbine and blanket flower

3. 25 feet

4. Mulching reduces soil moisture loss and temperature fluctuation, inhibits weed seed germination, and just plain looks snazzy.

5. Excess nutrients, such as nitrogen and phosphorous, stimulate algae growth in the Lake, leading to unpleasant blooms that cloud the water.

6. Land-owners installing BMPs can receive an exemption by contacting South Tahoe PUD.



Thank you to all Tahoe RCD contributors and partners for providing information for this issue.
870 Emerald Bay Road, Suite 108
South Lake Tahoe, CA 96150
530.543.1501 ext 113, Fax 530.543.1660, www.TahoeRCD.org