

Native Orchids of Nevada

by Carol Siegel



Photo by P. Garrett

Pity poor Hawaii. Contrary to its lush image as the Orchid Capital of the world, Hawaii has only three native orchids. Nevada, on the other hand, with its sizzling, dry deserts and freezing, snowy mountains, boasts FOURTEEN. Stand aside, Hawaii, as we strut our stuff.

It's not easy to be an orchid in Nevada, but our resilient and resourceful native orchids make their living in any microclimate that boasts a little water and a little shade. Three orchids live in the steaming desert of Las Vegas in Clark County, where temperatures can range from nine degrees to one hundred and nineteen degrees: *Epipactis gigantea* in many places in Red Rock Canyon National Conservation Area and elsewhere; *Platanthera dilatata* var. *leucostachys* in Kyle Canyon; and our common species *Platanthera sparsiflora*, in several locations in the Spring Mountains including Kyle and Lee Canyons. Four additional orchids live elsewhere in Southern Nevada including Clark, Nye and Lincoln counties: *Corallorhiza maculata*, *Spiranthes diluvialis*,



Photo by P. Garrett

Spiranthes infernalis, and *Spiranthes romanzoffiana*. Other Nevada orchids include *Corallorhiza striata*, *Listera convallarioides*, *Listera cordata*, *Platanthera tescamnis*, *Spiranthes porrifolia*, *Piperia unalascensis*, and *Platanthera stricta*.

All our orchids are "terrestrial" that is, they grow in the ground rather than clinging to the bark of a tree. An orchid is considered to be in Nevada if it is listed in herbaria (dried plant and information repositories) at the University of Nevada, Las Vegas or the

University of Nevada in Reno, or if it is listed as being an orchid from Nevada in one of these references: the *Flora of North America* Volume 26 (2002), *Luer's Native Orchids of the United States and Canada* (1975), *Correll's Native Orchids of North America* (1978), and/or *Brown's The Wild Orchids of North America North of Mexico* (2003). There may be other orchids in other counties, but this is a reliable start to cataloguing the orchids of Nevada.

Nevada has 14 native orchids, Hawaii has 3.

Photo by R. Coleman



Corallorhiza maculata

This is one of those orchids that doesn't look like most people's idea of an orchid. Known as the "Spotted Coral-Root", its fungus-infected roots have a knobby appearance like pieces of branched coral and its three-lobed white lip, and often its sepals, petals and column are dotted with reddish to purplish spots. This odd orchid gets its nourishment solely by being parasitic on its fungus hosts. As most orchids grow, they develop leaves and become self-supporting. *Corallorhiza maculata*, however, is like a teenager who never leaves home. It continues to feed off its fungus for food throughout its whole life.

Photo by R. Coleman



Corallorhiza striata var. *striata* and var. *vreelandii*

Corallorhiza striata, with its riot of stripes, is easy to tell from all the other coral-roots. About 16 inches tall, *C. striata* bears more than 45 heavily-striped flowers on leafless stems, each flower a little more than an inch across. Like all coral-roots, it never produces its own food. Different color forms of *C. striata* have been given formal names. The "*striata*" variety is larger, brown to reddish-brown with sepals and petals which have three to five reddish-to-brown veins. "*Vreelandii*", with a light-tan to yellowish base color and dull-brown stripes, is slightly smaller and less bright than "*striata*". Blooming season is from May to July, but individual plants do not bloom every year. Commonly called "Hooded" or "Striped Coral-Root."

Photo by P. Garrett



Epipactis gigantea

Sometimes known as the "Stream Orchid", this native loves to grow in wet places from sea level to 7500 feet, where it is found in bogs, hot springs, road cuts and wet cliff faces. It occurs all over Las Vegas where there is a little water: First Creek, La Madre Spring, Ash Spring, Pine Creek, Icebox Canyon, Spring Mountain Ranch, Sandstone Spring, and Blue Diamond. The plant blooms to about 3 feet high, with 12-20 flowers per inflorescence. The flowers are about 1½ to 2 inches across. Part of the lip is elongated and quivers in the breeze, earning it its other name, the "Chatterbox Orchid."

Photo by R. Coleman



Listera convallarioides

This beauty requires a magnifying glass to truly appreciate. "*Convallarioides*" means "like lily-of-the-valley", which it supposedly resembles. The genus *Listera* was named in honor of Martin Lister, an English botanist and scientist. Hard to find because of its small size, this orchid reaches just 10 inches tall but carries more than 25 small green or sometimes purple flowers. Commonly called the "Broadlipped Twayblade", the flower shape looks like a prehistoric bird or a mayfly.

Photo by R. Coleman



Listera cordata

An adorable, tiny plant just 4 to 10 inches tall, it bears up to 30 flowers that are deeply forked for half their length. The little flowers look like tiny elves, with a forked lip looking like legs, a tiny horn-like projection looking like arms, and petals and sepals spreading over the lip like the hat. *Listera cordata* is part of a genus commonly called "twayblades" because it always has two leaves. With its heart-shaped opposite leaves halfway up its stem, it has earned the title "Heart-Leaved Twayblade."

Photo by R. Coleman



Piperia unalascensis

The species is named for Unalaska, the Aleutian Island where it was first found. Commonly called “Alaskan Piperia” or “Slender Spire Orchid”, it carries small, delicate flowers in a spire from 6 to 24 inches tall. In the fall, *Piperia* forms new underground roots, one of which later forms a new tuber. Basal leaves appear in late fall to spring, and flower spikes rise from late spring to early summer. The leaves yellow and fall away before the flower opens. The flowers last from 4 to 6 weeks. Nocturnally fragrant, the flower attracts moths with its unusual smell, sometimes described as musky, soapy, or honey-like.

Photo by R. Coleman



Platanthera (syn. *Habenaria*) *dilatata*

“The Bog Candle”, “Scent-Bottle”, or “White Bog-Orchid” is a small white stalk of fragrant little flowers, maybe 8 inches high and looking just like a little white candle. They grow in many counties in Nevada, with some plants having as many as 248 flowers. There are two varieties of *Platanthera dilatata* in Nevada: the variety *albiflora* and the variety *leucostachys*, with var. *leucostachys* sometimes treated as a distinct species. Variety *leucostachys* (which means “white spike” in Greek) is easy to recognize because its flower is always white. The flowers are very fragrant, smelling a lot like cloves. The plant blooms from May to September.

Photo by R. Coleman



Platanthera (syn. *Habenaria*) *sparsiflora*

Flowering from April to September in wet meadows, marshes, stream banks and seeping slopes, this orchid is commonly called “Sparsely Flowering Bog Orchid”. Often producing over 120 green to yellowish-green very fragrant flowers per plant, it flowers sparsely only in comparison to *P. dilatata*. *P. sparsiflora* blooms at Mummy Springs in Mt. Charleston. Easily recognized by its green color and large column, the column fills half the “hood” formed by the sepals and petals. This narrow flower likes high elevations and wet ground. It is thought to be pollinated by a moth.

Photo by R. Coleman



Platanthera stricta

Sometimes called *Platanthera saccata* because of its “saccate” or purse-shaped spur, this 1 to 3 foot orchid can have sixty green flowers, sometimes with a purple tinge. Blooming from May to early August in Elko County at 7500 feet, it is called the “Slender Bog Orchid.” Insects with short mouthparts pollinate this orchid. It has a whole bouquet of treats to attract pollinators - floral fragrance, shimmering appearance of the inflorescence, extrafloral glucose to eat on the flower raceme, nectar in a spur, and a pollination chamber that can accommodate a variety of insects.

Photo by C. Sheviak



Platanthera tescamnis

A new species described in 2006, our fourteenth native orchid is a look-alike sister of *Platanthera sparsiflora* with some small differences in its sexual apparatus. It gets its name from “tesca” meaning “desert” and “amnis” meaning “swift-flowing river,” an allusion to the species’ typical habitat along arid-region streams. Found throughout the Spring Mountains and the Great Basin, this native orchid likes lower elevations and drier habitats than its sister orchid. Blooming from late June to early August, this tall, erect orchid is a hooded beauty.

Photo by C. Siegel



Spiranthes diluvialis

This rare orchid, a naturally-occurring hybrid of *S. romanzoffiana* and *S. magnicamporum*, blooms in July and August in moist-to-wet meadows, stream banks, and marshes. It is very rare in Nevada. Commonly called “Ute’s Ladies’-tresses”, it is pollinated by long-tongued bees, like bumblebees, who seek out the nectar. According to the Nevada Natural Heritage Program, *S. diluvialis* is listed as a threatened species under the U.S. Endangered Species Act. Until recently, Nevada’s only record dates from the 1930s. Against all odds, the plant was rediscovered in 2005 in Panaca in Lincoln County by the Greater Las Vegas Orchid Society.

Photo by R. Hewitt



Spiranthes infernalis

Spiranthes infernalis is found only in Ash Meadows and nowhere else in the world, but Ash Meadows National Wildlife Refuge is certainly an unlikely place to find an orchid. Hot, dry, and just nine miles from Death Valley Junction, the ground is so thickly covered with salt that it looks like winter snow. Yet, the 22,000 acres of meadows, springs and lakes contain a greater concentration of unique species than any other location in the United States - at least 24 plants and animals found nowhere else in the world - including *S. infernalis*. This tough little survivor looks like a tall, slender and spiraled birthday candle and is, unfortunately, threatened by invasive noxious weeds.

Photo by R. Coleman



Spiranthes porrifolia

“Porrifolia” comes from two Latin words meaning “leek green” and “leaves”, referring to the color of the leaves. The beautiful flower spike has multiple spirals of over 100 creamy yellow flowers. Restricted in range, *S. porrifolia* occurs in the western parts of the United States, mainly California, Oregon and Washington, hence its common name of “Western Ladies’-tresses.” It blooms in July and August which overlaps the blooming season of *Spiranthes romanzoffiana* and may account for the existence of natural hybrids between the two. It grows in moist meadows and seeps.

Photo by R. Coleman



Spiranthes romanzoffiana

The species is named in honor of Nicholas Romanzof, a Russian minister of state when the flower was discovered in Alaska, then a Russian territory. The sepals and petals form a hood over the column and the basal half of the lip, leading to its common name of “Hooded Ladies’-tresses.” In the Southwest, blooms between 4 and 16 inches tall bear up to 60 flowers in three dense spirals. *S. romanzoffiana* occurs in meadows as well as springs and grassy, wet areas. Except in August when it blooms, this orchid is difficult to find because grasses and other plants hide its short leaves. *S. romanzoffiana* has a sweet aroma described as that of sweet lilacs.

So there we have them, all fourteen. What a thrill to know that so many native orchids have found a home in Nevada. For additional information, see the complete paper by Carol Siegel on the website of The Greater Las Vegas Orchid Society (www.GLVOS.org) or the website of the Arboretum at UNLV (<http://hrc.nevada.edu/arboretum/>).