

## Lifestyle

## Shasta snow-wreath: A long-hidden treasure

## Shrub was incognito until 1992

By Laura Christman Redding Record Searchlight, May 6, 2011



Shasta snow-wreath has unusual flowers. The white tufts are made mostly of stamens rather than petals. The flowers are on the plant for a only week or so.

Shasta snow-wreath only grows in the north state. It has oddball flowers? tufts of stamens rather than petals. And it's related to plants from the Eocene period 45 million years ago or so.

But perhaps *Neviusia cliftonii's* biggest distinction is that it went so long before it was noticed. Botanists didn't find it until 1992.

"It made a big stir when it was discovered and published," said Julie Kierstead Nelson, forest botanist for Shasta-Trinity National Forest in Redding.

The native Californian shrub had been hiding in plain sight not far from busy roads, along the shore of Lake Shasta and in the lake's canyons and drainages.

"Scientists had been crawling through the stuff since the '40s and '50s, but they were doing salamander work and didn't know what it was," said Len Lindstrand, wildlife biologist with North State Resources in Redding.

"It's hardly cryptic. It's a shrub that's three feet high," Kierstead Nelson noted.

Both Lindstrand and Kierstead Nelson have written papers and given talks on Shasta snow-wreath. Lindstrand said most new botanical discoveries are "teeny little obscure things you have to be on your belly to see."

"It's very rare to find something new that is that big," he said. Shasta snow-wreath is often knee-high but can grow to be shoulder-high, he said.

Shasta snow-wreath remained incognito so long because its flowers? the most distinguishing feature? only appear for a week to 10 days in late April or early May, Kierstead Nelson said.

"When it is not flowering it looks like a lot of other things," she said.

"It's part of the green blur on the forest floor," Lindstrand said.

Another factor that helped the wiry, deciduous shrub with soft, tooth-edged leavesremain anonymous is that it likes to grow in places loaded with poison oak, Kierstead Nelson noted.

Dean Taylor and Glenn Clifton, botanists for a Santa Cruz consulting firm, noticed the plant while exploring along Cedar Creek just west of Round Mountain in May 1992. Neither one could identify it. When they showed the plant to other botanists, they were stumped too.

Scientists eventually determined it to be in the genus Neviusia (part of the rose family), with one other species, Alabama snow-wreath, a rare plant in the South. Through leaf fossils, Shasta snow-wreath was linked to shrubs from prehistoric times.

In spring 1993, the Great Snow-wreath Expedition was launched. Close to 50 botanists, naturalists and other plant people spent a weekend at Lake Shasta searching for the shrub.

"By the end of that one weekend we had six or seven sites," Kierstead Nelson said.

Botanists first thought Shasta snow-wreath grew only in limestone locations. But the plant has since been found in areas far removed from limestone. At last count there were 21 Shasta snow-wreath sites in Shasta County, according to Kierstead Nelson. The populations vary from "a few scraggly plants to some good-sized areas that are acres in size," Kierstead Nelson said.

Even though the plants in each grouping look just like those in other locations, they are genetically different, she said. Lindstrand explained that Shasta snow-wreath can reproduce by cloning itself from its roots, so "a humongous patch can basically be one big plant."

While not on federal or state endangered species lists, Shasta snow-wreath is considered a sensitive species by the Forest Service.

Lindstrand said groupings of Shasta snow-wreath were likely lost when Lake Shasta was created. "More than half are right down at the lake edge. Circumstantial evidence is that before the lake inundated the area, populations were down in those areas."

The area around Lake Shasta where Shasta snow-wreath grows is rich in biodiversity, Lindstrand said. Also living there are a salamander and two types of snails not found in any other part of the world, he said.

"This is a little area that escaped the geological processes around it and that makes it very old," he said.

Being endemic to Shasta County is just one thing that makes Shasta snow-wreath interesting plant, Lindstrand said. It also has unusual flowers. Lindstrand described them as "little poof balls"? clusters of stamens rather than petals.

"Usually the flower has no petals or just one," Kierstead Nelson said.

Lindstrand said the dime-size, white tufts aren't fragrant. "You don't see a lot of bees or butterflies or bugs on them. No one really knows what pollinates these things."

Kierstead Nelson has propagated Shasta snow-wreath from cuttings and has it growing at her Redding home. "It's not as showy as some things, but it is a reasonably attractive plant," she said.

Lindstrand also has the shrubs in his Redding yard. "One flowers like crazy and the rest of them don't," he said.

An easy place to see Shasta snow-wreath is along the Waters Gulch Trail at Lake Shasta, Kierstead Nelson said. "No more than a quarter mile down the trail there is quite a lot of it on both sides of the trail."

The trail can be reached from the Packers Bay exit on Interstate 5 (from northbound I-5, take the O'Brien exit, get back on I-5 heading south, then exit at Packers Bay).

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