

Trifolium microcephalum Small-headed Clover

by Kathy Lloyd
Montana Native Plant Society

Small-headed, or littlehead, clover was collected on July 1 or 2, 1806 near Traveler's Rest in Missoula County. Meriwether Lewis made five plant collections while the expedition was camped at Traveler's Rest on their return journey. It is amazing that he was able to collect and press plant specimens given the urgent planning and preparations that were taking place. The Corps of Discovery was about to be divided into two main parties – the first time the explorers had been separated for any length of time since leaving St. Louis. Lewis and nine men would travel over the Continental Divide and explore the Marias River system. Clark and the remainder of the party, including Sacagawea and her son, would go back to Camp Fortunate near Lemhi Pass, retrieve the items cached there, and then cross to the Yellowstone River. John Ordway and a group of men would take the canoes down the Missouri River, portage around the Great Falls, and meet Lewis at the mouth of the Marias River. The two captains planned to meet at the confluence of the Missouri and Yellowstone Rivers.

There are two specimen sheets containing small-headed clover, *Trifolium microcephalum*, in existence today. They are housed in the Lewis & Clark Herbarium in Philadelphia. One sheet contains a Lewis collection of small-headed clover with a label applied by the botanist Frederick Pursh that says, "Valley of Clarks R. Jul. 1st 1806." This specimen is on permanent loan to the Academy of Natural Sciences from the American Philosophical Society. The other sheet has several different specimens of small-headed clover, including two collected by Meriwether Lewis. The Pursh label below them reads, "Trifolium parviflorum. Valley of Clarks River. Jul. 1st 1806." There is also a label written by A. B. Lambert, "Herb Lewis & Clarck." The two Lewis specimens on this sheet, which also contains Thomas Nuttall and J. M. Bigelow specimens, have a very interesting history. They were among a group



Photo: Wayne Phillips

Trifolium microcephalum (Small-headed Clover)

of plants from the Lewis and Clark Expedition that Frederick Pursh, without prior approval, took with him to London. Small-headed clover was one of 130 plant species first described for western science in Pursh's book, *Flora Americae Septentrionalis*, published in 1814. Pursh worked in the herbarium of his sponsor, A. B. Lambert, and his collection of Lewis and Clark plants remained in Lambert's herbarium when Pursh traveled to Canada, where he died in 1820. Lambert was an enthusiastic collector of plant specimens and when he died in 1842 Sotheby's auctioned off his collection. Fortunately for us, an American named Edward Tuckerman happened to be at the auction and bought the plant specimens that had been collected during the Lewis and Clark Expedition. He brought them back to the United States and eventually donated them to the Academy of Natural Sciences, where they are today as part of the Lewis & Clark Herbarium.

Although the label on both specimen sheets says the plants were collected on July 1, Gary Moulton, editor of the *Journals of the Lewis & Clark Expedition*, and other Lewis and Clark scholars and botanists believe they may have been collected on July 2, when Lewis wrote in his journal, "I found two species of native clover here, the one with a very narrow small leaf and a pale red flower, the other nearly as luxuriant as our red clover with a white flower the leaf and blume of the latter are proportionably large. I found several other uncommon plants specimens of which I preserved."

Small-headed clover, a member of the pea or bean family (Fabaceae), is an annual that can stand upright to as much as 28 inches, or recline along the ground. It is somewhat hairy and has three rounded leaflets and a look typical of many clover species. Indeed, in Latin *trifolium* means having three leaves. There are leaf-like stipules at the base of the leaflets that are about half as long as the leaflets. The flower heads contain from 10 to 60 tiny flowers clustered into one small, white or pink head. True to its name *microcephalum*, this clover is small-headed. The legume-like seedpod contains one or two seeds.

Small-headed clover inhabits dry hillsides, moist meadows and sandy stream areas all the way from Alaska and British Columbia to Baja California and east into Montana, Arizona and Nevada. It is found in lowland areas as well as mountainous regions and flowers from April to July, depending on the elevation and other conditions. Most of Lewis's small-headed clover collections from early July still have flowers.

There are nearly 300 species of clover worldwide, many of them from western North America. Various species of clover were used as food, both raw and cooked, by Native Americans. Small-headed clover was used cooked as a potherb. Clover species have also been used medicinally. A poultice of chopped leaves was applied to cuts and wounds to stop bleeding and used for eye problems. Internally clover has been used as a "blood medicine," a cancer treatment, an aid for perimenopausal symptoms and for fevers, colds and asthma.

If you visit Traveler's Rest State Park, it might be fun to see if you can locate some of the plant species that were collected in that vicinity in 1806. Small-headed clover is one of them.