







The native habitats of these plants at the junction of the Columbia and Snake rivers had been greatly altered since 1805. Many dryland habitats have been replaced by cultivated fields or developed as urban areas. All the native river habitats have been inundated by slack water reservoirs created by downriver hydroelectric dams constructed since 1950. The only unimpounded segment of the Columbia River in eastern Washington is the Hanford Reach north of Richland. All the Snake River in eastern Washington has been impounded.



Camped at the Wallah Wallah Indian village on April 27, 1806, Lewis wrote, "we collected some of the dry stalks of weeds and the stems of a shrub which resembles the southernwood; made a small fire and boiled a small quantity of our jerked meat on which we dined." The chief of the Wallah Wallahs', Yellept, then "haranged his village in our favour and intreated them to furnish us with fuel and provision and set the example himself by bringing us an armfull of wood . . . they birn the stems of the shrubs in the plains, there being no timber in the neighbourhood of any discription."

-Bernard DeVoto The Journals of Lewis and Clark





 Written by William H. Rickard, Ph.D. Botanist

Produced and printed using Battelle funds. June 2003

## Flowering Plants Lewis and Clark Collected Along the Snake and Columbia Rivers

In early September 1805, Captains Meriwether Lewis and William Clark traveled downstream along the Bitterroot River in southwestern Montana. They had already crossed the Continental Divide separating the Missouri and Columbia river drainages and were now in the Columbia River drainage, which empties into the Pacific Ocean, the target of their journey.

The expedition crossed the rugged Bitterroot Mountains in northern Idaho at Lolo Pass and entered the upper reaches of the Clearwater River, which flows into the Snake (then named Lewis's) River near the present-day town of Clarkston.

They traveled down the Snake River and saw the Columbia for the first time on October 16, 1805. Here they promptly noted the great clarity of









the Columbia River water—a striking contrast to the muddy Missouri River. Lewis and Clark had traveled nearly 2,000 miles from the Expedition's starting point near St. Louis, Missouri, and were now only 300 miles from the Pacific Ocean.

## Plants Collected in October 1805 and April 1806

When Lewis and Clark first saw the Columbia River near the present-day Tri-Cities, Washington, in October 1805, little woody riparian habitat existed. Willows were the dominant woody plant. Trees were scarce."...there is no timber of any sort except small willow bushes in sight in any direction," an entry noted from the journals of Lewis and Clark for October 17, 1805.

The expedition collected four species of autumn-flowering plants along the lower Snake and Columbia rivers at that time: Oregon aster (*Aster oregonensis*), Columbia tickseed (*Coreopsis tinctoria*), gray rabbitbrush (*Ericameria nauseosa*), and hoary aster (*Macheranthera canescens*).

The following April, on their return journey up the Columbia and Snake rivers, Lewis and Clark collected many more plant species in the region, as listed below.

- Klickitat County, Washington: arrowleaf balsamroot (*Balsamhoriza sagitatta*), chickweed (*Cerastium arvense*), and Gray's desertparsley (*Lomatium grayi*)
- The Dalles, Oregon: service berry (*Amelanchier alnifolia*)
- Wasco County, Oregon: tarweed (Amsinckia tessellata), miner's lettuce (Claytonia perfoliata), blue-eyed Mary (Collinsia parviflora), narrowleaf collomia (Collomia linearis), and desertparsley (Lomatium nudicaule)
- Columbia River, Washington: microseris (*Microseris lindleyi*), threadleaf scorpion weed (*Phaecelia linearis*), popcorn flower (*Plagiobothrys tenellus*), bigheaded clover

(*Trifolium macrocephalum*), and cluster lily (*Triteleia grandiflora*)

• Walla Walla County, Washington: black hawthorn (*Crataegus douglasii*) and cous desertparsley (*Lomatium cous*)

Although the expedition collected these species, the plants were actually identified by specialists in Philadelphia, where Lewis had studied botany and zoology. Dried/pressed specimens of these plants are held in the Lewis and Clark Herbarium at the National Academy of Natural Sciences in Philadelphia.

## Plant Species Found in October 2001

In October 2001, Battelle scientists searched cobblestone beaches and dryland habitats along the Columbia River to find the same or closely related species collected by Lewis and Clark in October 1805. The Columbia tickseed, hoary aster, and rabbitbrush were found along with the western marsh aster (*Aster hesperius*).