**A look back at the Missouri Headwaters**

**July 27, 1805**

Missouri Headwaters

"...At the junction of the S.E. fork of the Missouri...the country opens suddenly to extensive and beautiful plains and meadows which appear to be surrounded in every direction with distant and lofty mountains; supposing this to be the three forks of the Missouri I named the party."

MERRICKET LEWIS

July 27, 1805—Lewis and Clark halted at the three forks of the Missouri—the headwaters. Meriwether Lewis carefully described a new species of black gooseberry in his journal. Three rivers, the Jefferson, the Madison, and the Gallatin, come together at what today is called Three Forks. Lewis walked up the southeast fork, today’s Gallatin River, about 1/2 mile, and ascended the point of a high limestone cliff. On the 26th, Lewis observed many native plants, including what he called the globe cactus and numerous mountain berries. The expedition proceeded up the Jefferson River, deemed the most logical choice for continued exploration.

### Native Plant Species

<table>
<thead>
<tr>
<th>Needle and Thread Grass</th>
<th>Pincushion Cactus</th>
<th>Chokecherry</th>
</tr>
</thead>
<tbody>
<tr>
<td>height: 1 to 2.5 inches</td>
<td>height: 1 to 2 inches</td>
<td>height: 6 to 20 feet</td>
</tr>
<tr>
<td>habitat: plains and prairie</td>
<td>habitat: neary</td>
<td>habitat: thicker</td>
</tr>
<tr>
<td>The needle and thread grass seed looks like a sewing needle attached to thread. Seeds attach easily to human clothing and animal fur, and can work their way through fabric and skin. Lewis complained frequently about removing seeds from his uniform and gear.</td>
<td>in the ground on valley bottoms and foothills of desert and grassland.</td>
<td>along streams and in valley bottoms.</td>
</tr>
</tbody>
</table>

**Today**—As you look back at Missouri Headwaters State Park history and plants, you will observe invading plant species like houndstongue and Canada thistle that were not here when Lewis and Clark arrived at the Headwaters. Non-native plant species we find today at many areas around the Gallatin, Jefferson, and Madison rivers were brought by unsuspecting travelers along waterways, roads, and hiking trails. Wildlife, people, and pets transport seeds on their coats, clothing, shoe treads, vehicle tires, and boat bottoms.

Once introduced, invading species thrive in Montana’s climate. Canada thistle adapts to many habitat types and spreads rapidly as does leafy spurge. Leafy spurge and houndstongue are toxic to animals. You can help protect pristine areas from invading species by not walking or driving through infestations.

You may see these three invading plant species when you visit Missouri Headwaters State Park near Three Forks.

### Invasive Plant Species

<table>
<thead>
<tr>
<th>Houndstongue</th>
<th>Thistle</th>
<th>Leafy spurge</th>
</tr>
</thead>
<tbody>
<tr>
<td>height: 1 to 4 feet</td>
<td>height: 1 to 4 feet</td>
<td>height: 1 to 3 feet</td>
</tr>
<tr>
<td>habitant: pasture, along roadsides, in disturbed habitats</td>
<td>habitant: wide range and adaptable to most habitat types</td>
<td>habitant: soil ranging from riparian to hillsides</td>
</tr>
</tbody>
</table>

Houndstongue is toxic. The plant forms first year rosettes and purple velvety drooping flowers the second year. Seeds attach to human clothing and to animals, enhancing spread to new areas.

Canada thistle is common. Creeping horizontal roots are the key to its survival and establishment. Plants reproduce by seeds, and seeds are easily dispersed by wind.

This invader takes over banks along rivers and streams and easily adapts to dry rocky mountain land, prairie, range, and wetland. Stems and leaves contain a milky latex that is known to be toxic and may cause blistering on skin, or eye irritation.

Montana artist Don Greytak has creatively portrayed the convergence of the Jefferson, Madison, and Gallatin rivers at the arrival of Meriwether Lewis and William Clark on July 27, 1805.

[www.dongreytak.com](http://www.dongreytak.com)  
[www.mtweb.org](http://www.mtweb.org)  
[www.wedcenter.org](http://www.wedcenter.org)  
[www.stopweeds.org](http://www.stopweeds.org)  
[www.wedawareness.org](http://www.wedawareness.org)  
[www.whatistyourworld.org](http://www.whatistyourworld.org)

Pulling Together Against Noxious Weeds

**Statewide Noxious Weed Awareness and Education Campaign**

The Lewis and Clark National Historic Trail's educational project was initiated and developed in 1997 by Montana’s Statewide Noxious Weed Awareness and Education Campaign Task Force. The project grew to eleven locations by 2005 with the addition of Three Forks. The project cooperates with Montana ‘s state Department of Fish, Wildlife and Parks.

By 2007 co-operation increased to the diverse audiences shown on the reverse side of this sheet.

**Cymophacum officinalis**  
**Cirsium arvense**  
**Euphorbia vulgata**