

Spirit Mound Trust
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Symphotrichum (sim-fy-oh-try-kum)

Jim Heisinger

It all started simply enough. On September 26, I was hiking the Spirit Mound trail while talking with Tom and Brenda Johnson about the plants of Spirit Mound. Suddenly, I spotted about a dozen tall plants half way up the south face of the Mound poking their brown rounded seed heads higher than the summit itself. Even from this distance I knew these were plants I had never seen before. The three of us stumbled through the prairie grass and saw plants three feet tall, crowded with slender three-parted leaves, topped by a head of rich brown bracts (modified leaves). Tom had seen the plant before and remembered that the genus began with the letter L. I was armed only with Theodore Van Bruggen's picture manual *Wildflowers & Grasses of the Northern Plains and Black Hills*. I opened the manual to the index and thrust it to Tom. He uttered "Lespedeza" and flipped to page 95 to view a beautiful picture of *Lespedeza capitata*, aka bushclover.



Roundhead Bushclover

I was stunned into silence. I remembered that last December I had struggled through the snow with four prairie fans sprinkling native plant seeds on the snow crust in this spot of discovery. It was a Eureka moment. When I arrived home I verified that this species had not been found on the Mound previously and that its seeds were among those we had sown.

Elated, I visited the Mound several times in October. By mid-October the prairie's pale pink, yellow, orange and brown grasses stood in colorful contrast to the numerous white and blue asters. I had long avoided aster identification; so many asters, so many botanical terms. However, buoyed by the discovery of

bushclover, I decided to tackle the aster genus.

Wikipedia gave a warning. The taxonomy of the genus Aster had undergone a molecular revolution. Evidence from both new morphological studies and DNA analysis forced the experts to break the genus into at least 10 new genera. Another Spirit Mound Trust member had identified



Aromatic Aster

several of these at the mound; one genus with several species was *Symphotrichum*. I returned to the Mound a couple of weeks later and found that the beautiful flowers had turned brown along with



Smooth Blue Aster

their leaves. Yes, by the time I learned to pronounce the genus *sim-fy-oh-tri-cum* (Greek *symphyos* = growing together and *thrix* = hair, referring to the hair-like flowers) they were gone. Next year they will certainly return and so, I hope, will I. Plant diversity and form is seemingly infinite and beautiful.



Heath Aster

Photographs of Native Wildflowers on Spirit Mound by Diane Blankenship

Hilltopping Butterflies at Spirit Mound

Mark Wetmore

The next time you climb Spirit Mound in the summer, watch for the large black butterfly with yellow markings, at the summit. Very often, there is a black swallowtail (*Papilio polyxenes asterius*), usually just a single individual, flying back and forth or just resting at the top of the hill. Google the term hilltopping and numerous references come up. This is the best short discussion I've found:



Male Black Swallowtail at end of season.
Spirit Mound summit, 9-26-11.

Many butterflies and other insects fly to hilltops in order to mate. Hilltopping is in many aspects similar to lek behavior shown by many birds... It is believed to increase the mating efficiency of individuals of a species reducing the area in which sexual encounters can occur. (Though) it is not obvious why hilltops would become rendezvous points for any species. It has been noted that these sites generally do not contain food resources for adult butterflies, nor are they locations where females emerge, lay eggs, or even rest. There are only males waiting to mate (<http://lepidopteraresearchfoundation.org/journals/29/PDF29/29-134.pdf>).

So resist the temptation to imagine black butterflies as familiars of the little spirits, and enjoy the natural phenomenon of the hilltopping black swallowtails on Spirit Mound.

Photograph by Mark Wetmore

An Invitation to Join in the Pursuit of Native Plants on Spirit Mound

The Spirit Mound Trust Board wants you to join us in our joyful pursuit of undiscovered Mound species. You may be fortunate to blunder upon one as we did and identify it with one of numerous illustrated manuals. Next spring we will post a list of all of the native species documented at the Mound and complete details of a plant discovery challenge (www.spiritmound.org). A Spirit Mound Lapel Pin will be awarded for each new native species reported to info@spiritmound.org and verified by Trust members. The person describing the largest number of newly discovered native plants at the Mound will receive a print entitled *Lewis and Clark's Spirit Mound*. This beautiful depiction of expedition members on the Mound was created by acclaimed historical artist Ron Backer. So dust off your manuals and keys and prepare for an intellectual and visual feast along the historic trail at Spirit Mound.

A Warm November Day

Mark Wetmore

My mother and I often take a lunch and eat in the car at the Mound parking lot. It's very rare that we are the only vehicle there and it's always fun to see how much the mound is used and where the visitors are from. A late-season example was Friday, November 11th, a beautiful sixty-degree Veterans Day. When we arrived, cars from Plymouth County, Iowa and Union and Clay counties in South Dakota were already there, filled with people also eating their lunches.

A little later a small mob of adults and kids of all sizes emerged, armed with notebooks. They were a home school group on a nature walk. They had been to the mound six weeks before, studying asters, and had returned to see it in a late fall setting.

Then a nicely-dressed young woman with a Sioux Falls license plate drove in from the north, got out and started up the trail. And as we were leaving a Wisconsin car pulled into the lot. Not bad for thirty minutes on a November day.

Visitors enjoying the site are prime candidates for Trust membership. We intend to keep copies of this newsletter at the kiosk next year to gain more support for the Mound.

Small Trees Removed from Mound

Mark Wetmore

After the Spirit Mound site was entirely cleared in 2001, many small trees started to grow on the restored prairie. Mostly red cedars, mulberries and cottonwoods, they would severely degrade the prairie ecology if allowed to grow. This past October the Spirit Mound Trust hired a four-member crew from the Conservation Corps of Iowa and Minnesota. An offshoot of AmeriCorps, the Conservation Corps "has the goal of providing hands-on environmental stewardship and service-learning opportunities to youth and young adults while accomplishing conservation, natural resource management and emergency response work." They did fine work for us on the Mound, clearing the entire site of the unwanted trees in a day and a half.



Conservation Corps Crew 10-2-11

From left to right: Scott Cressler, Ethan Thies, Hannah Frederick, Mark Wilson

Photograph by Mark Wetmore

Spirit Mound Trust Board of Directors:

Dianne Blankenship, Deron Ruesch, Brian Hazlett, Elizabeth Hill, James Heisinger (President), Jim Peterson, Mark Wetmore (Vice President and Treasurer), Norma Wilson (Newsletter Editor) and Tim Cowman (Web person).

Spirit Mound

By Mary Inman Begley

*A whale surfaces
From the prairie sea.*

*Her mammoth back
Humps gently upward
Suspended in time,
Tail held high catching the moist dirt air.*

*Travelers climb
Upon her spine
To ride
The bucking land of
Thistle, clover, and sweet grass.
She spouts Dakota winds,
Sudden storms,
Misty fog,
And flakes of snow.*

*Firefly lighthouses
Hover in her wake
And
Offer their light
To bowing blades of sage
Whispering Lakota prayers.*

Articles added to our web site SpiritMound.org:

Kent Scribner's "Spirit Mound After Lewis & Clark" and Norma Wilson's "The Literary Tradition of Spirit Mound" will soon be added to the Spirit Mound Trust website. Scribner, is a retired USD Foundation development officer and amateur historian, Wilson, is a retired USD English Professor Emeritus. Earlier versions of the articles were published in 2004 by Augustana College's Center for Western Studies in *The Lewis and Clark Expedition: Then and Now*, ed. David Kvernes.

Support the Mound

Spirit Mound Trust membership is \$10 per year. Additional donations are welcome, and all are tax deductible. Your support helps to develop a better, more diverse historic prairie and fund other programs to make the Mound a more interesting place to visit. Our address is P.O. Box 603, Vermillion, SD 57069. Please join us:

SPIRIT MOUND HISTORIC PRAIRIE MEMBERSHIP RENEWAL AND ORDER FORM	
Please add my name to the 2012 membership rolls of the <i>Lewis and Clark Spirit Mound Trust</i> . I enclose my check for \$10.00 (tax deductible*). Members receive our newsletter. Additional contributions are welcome.	Please send me the following:
Name _____	Ron Backer Prints (\$100) Number of prints _____
Address _____	Lapel Pin (\$5) Number of pins _____
City _____	Total Enclosed: _____
State _____ Zip _____	REMIT TO: SPIRIT MOUND TRUST P. O. Box 603 Vermillion, SD 57069
Telephone (Optional) _____	
Email (Optional) _____	
<small>*Tax exempt 501 (c) (3) organization (No 93-0921345)</small>	

Spirit Mound Trust's Accomplishments Since the Opening of the Park in 2004

- Placed native plant species signs along the main trail.
- Broadcast seeds of more than 80 native plant species and planted many forbes.
- Planted and maintained three areas of wild plum, chokecherry and buffalo berry bushes.
- Experimented with various methods of brome grass control.
- Created a spur path along Spirit Mound Creek.
- Installed a bench at the end of the spur path.
- Installed an interpretive sign by a mound of ants along the spur trail.
- Identified and documented a colony of prairie thatching ants on Spirit Mound.
- Installed a new bench along the main trail.
- Designed and maintained the web site, adding cultural, historic and scientific information, including a field guide to plants on the Mound.
- Placed an interpretive sign by a glacial erratic boulder along the main trail.
- Sponsored the "Grass Dance Special for Spirit Mound."
- Sponsored a "River, Mound, Prairie, Sky" Art Exhibit at Washington Street Arts Center.
- Sponsored geologic research on the structure of Spirit Mound.
- Hired a four-member crew from the Conservation Corps to remove numerous small red cedar, mulberry and cottonwood trees from the prairie.
- Established a fund for encouraging historic and scientific studies related to Spirit Mound
- Publicized Spirit Mound activities and developments in our newsletter.