

Pajarito Environmental Education Center Grant Report/Article to Native Plant Society of New Mexico

Pajarito Environmental Education Center Builds a Foundation for Native Plant Education at the Los Alamos Nature Center
[Short version] Native Plant Garden Grows at the Los Alamos Nature Center

In 2015 the Pajarito Environmental Education Center (PEEC) proudly opened the doors of a new nature center funded by Los Alamos County. The landscaping surrounding the building is maintained in part by the County and primarily by PEEC volunteers. PEEC's Landscaping Committee, under the leadership of Becky Oertel, was responsible for funding, designing, and installing the landscaping directly in front of the new building. The County graciously allowed the Landscaping Committee to choose plants for the remaining landscaped area.

The organizing principle behind PEEC's landscaping efforts is the creation of three raised-bed gardens that resemble the three major mesas of the Pajarito Plateau. Each raised bed has a different focus: native plants, xeric plants, and pollinator plants. Together, they provide opportunities for visitors to learn about local botany, water conservation, and pollinators.

The Native Plant Society of New Mexico gave PEEC a grant to purchase plants for the native garden, soil for all three gardens, and shrubs for the area near the gardens.

Design and Construction

The raised bed design concept sprouted from work by an innovative group of PEEC members: Natali Steinberg, Dorothy Hoard, Selvi Viswanathan, and Mary Carol Williams. The design echoed the finger mesas of Los Alamos. Low water use gardens need minimal long-term maintenance, and beautiful collections of plants draw visitors outdoors. The most colorful garden, the pollinator garden, is closest to the building, while the native garden is closer to the "wilder" side of the space, where the children's nature play area is located.

The raised-bed gardens were constructed of hand-chiseled, dray-stacked moss rock pieced together like an intricate puzzle. Capital campaign funds raised by PEEC were used to construct these beds.

Numerous gardeners from the Landscaping Committee and PEEC's wonderful pool of volunteers brought the garden to life in May 2015. A drip irrigation system provides each garden with rainwater collected from the nature center roof and stored in an underground cistern. The irrigation system includes numerous valves and a controller to minimize water use. In addition, the gardeners and volunteers used three different types of mulch to lessen water loss via evaporation.

Garden Highlights

Native Garden. The vibrant and vigorous growth in this garden now serves as an important live demonstration of how to grow native plants. During the first year, *Aquilegia coerulea* (Rocky Mountain Columbine) and *Cleome serrulata* (Rocky Mountain Bee Plant) grew robustly—some of the columbine flowers were 3 to 4 inches in diameter. Natali Steinberg grew some flowers from seed, including *Ratibida columnifera* (Prairie Cone Flower), *Gaillardia aristata* (Blanketflower), and several penstemons.

Those who tended the garden observed that the native bed needed less water during the initial establishment period and after the frequent summer rains ended.

Xeric Garden. Local lizards love this garden. A native shrub, *Rhus trilobata* (skunkbush sumac) was covered in blooms, and the Broom hybrids (Cystisus 'Spanish Gold' and Cystisus 'Burkwoodii') added a beautiful yellow glow to the garden.

Pollinator Garden. The flowers in this garden were amazing this year, inspiring visitors to request information about how to grow the plants in all three gardens. *Buddleia davidii* (Butterfly bush) and *Rudbeckia hirta* (Black-eyed Susan) were among the most impressive plants in this garden.

Educating the Public

These gardens have surprised even the most optimistic of the PEEC volunteers. The amazing colors brought people outside, where we were able to engage and educate visitors of all ages about the interconnectedness of plants, pollinators, mammals, drought tolerance, and local native plants.

Numerous visitors submitted photos, and almost daily—until the autumn dieback—our docents were peppered with questions about the gardens and the many butterflies they attracted. Educators at PEEC have used the gardens to teach about soil mechanics, water infiltration, techniques for recognizing native plants, and the importance of pollinators such as bees, butterflies, and hummingbirds in our local ecosystems.

Unexpected Benefit

Early on the gardens served as a terrific salad bar for the local deer population. As Natali Steinberg recalls, “The deer particularly loved the plants in the native bed. They continually ate the flowers of the two species of columbine and the evening primrose. We discussed whether or not to try to prevent the deer from having their daily dessert at our expense, but the decision was made to allow them anything they wanted. Our nature center is just that—a place for all species to live together in harmony.”

Their decision allowed the grazed plants to respond by strengthening their root systems. Later in the season, these plants bloomed with an explosion of color.

Thank you to all the volunteers who made the gardens possible.

Photos:

| File Name | Subject | Caption | Photographer |
|----------------------|--|--|---------------------|
| IMG_3448_1024.jpg | Winter construction of garden rock walls | Hand-chiseled rocks for the raised bed walls rest under a fresh layer of snow. | Becky Oertel |
| IMG_3491_2_1024.jpg? | Winter construction of garden | The three raised beds begin to take shape. | Becky Oertel |

| | | | |
|--|--|--|-------------------|
| | rock walls – showing all three gardens | | |
| IMG_3580_1024.jpg | Finished garden walls with Gopher wire in the bottom | Each raised bed is lined with gopher wire and surrounded by sturdy, thick rock walls. | Becky Oertel |
| thumb_IMG_4833_1024.jpg | Blooms in the Pollinator Garden | <i>Ratibida columnifera</i> , <i>Echinacea purpurea</i> , and <i>Coreopsis verticillata</i> 'Zagreb' grace the pollinator garden. | Becky Oertel |
| Natali and Becky working.jpg | Natali and Becky Working | Becky Oertel and Natali Steinberg plant the raised beds with care. | Selvi Viswanathan |
| Stephen Shankland_21686248573_94cb0b1b69_k.jpg | All three gardens and the building | The raised bed gardens flourished over the summer and provided outdoor education for all ages at the new Los Alamos Nature Center, an endeavor that will continue for years to come. | Stephen Shankland |