

Geothermal Greenhouse Partnership: “Growing food and community with local energy”

What a sight to see! Geothermal Greenhouse Partnership’s (GGP) long-awaited Community Garden and Innovation Domes are being completed in summer 2018, along with initial outdoor landscaping. Meanwhile, GGP’s Education Dome and Amphitheater continue to bustle with various community activities.

Geothermal Greenhouse Partnership, a 501c3 nonprofit, operates an educational park in downtown Pagosa Springs. The grass-roots organization of civic entrepreneurs, volunteers, members and donors has worked tirelessly since incorporation in 2013. Its original goal of three geothermally heated greenhouses for year-round food production – the Education Dome, the Community Garden Dome and the innovation Dome - is being realized.

The GGP park demonstrates geothermal direct energy use, sustainable horticulture, and environmental awareness. Twenty-first century water conservation and geothermal potential are priorities of GGP’s mission. The volunteer-driven organization benefits from a professional board of directors and makes decisions through strategically focused committees.

The Education Dome and Educational Programs

Initial operations in the Education Dome evidence GGP’s core value of community. The Education Dome was first planted in November 2016 by Colorado Master Gardeners. Classes from Archuleta Public Schools and 4-H Gardeners began growing food soon after. Thanks to volunteers, beneficial ladybugs patrol, Monarch butterflies hatch from cocoons, and goldfish and water plants populate the pond. GGP volunteers harvest and sell greens and tomatoes at the Ed Dome each Tuesday and Saturday, as well as at the Pagosa Farmers Market.

Educational workshops strengthen community partnerships. Weminuche Audubon and Audubon Rockies collaborated in explorations of birds and native plants along Pagosa’s River Walk. An expert from Fort Lewis College joined GGP to increase understanding of pest and beneficial insects in our gardens. Numerous successful local gardeners taught a comprehensive Greenhouse Gardening workshop in the filled-to-capacity Education Dome. Six regional chefs demonstrated gourmet recipes using the “Three Sisters” (corn, beans and squash) for a sold-out crowd of GGP supporters at the Aragon Community Center. Proceeds from workshops return to GGP’s ongoing educational programs for all ages.

In its second year, Pagosa Peak Open School and Pagosa Family School joined Ed Dome activities. 4-H Gardeners continued to grow in their dedicated garden bed. Chimney Rock Interpretive Association started “Three Sisters” demonstration container gardens for the National Monument. The local Pagosa Skyrocket working group again propagated endangered *Ipomopsis polyantha*.

GGP’s sixth Colorado Environmental Film Festival Caravan brought award winning environmental documentaries to Pagosa Springs. GGP’s environmental educators partnered with the high school’s Youth Rise class to examine numerous local environmental issues. Colorado School of Mines (CSM) students, University of New Mexico’s Climate Change Symposium, and representatives from the National Renewable Energy Laboratory toured the GGP site. Colorado Geological Survey joined CSM to present a retrospective of Archuleta County’s geothermal aquifer.

GGP’s Education Dome continues to open to the public on Tuesdays and Saturdays and the organization plans to open more hours as soon as possible. GGP-grown starter plants and produce are once again available at the Pagosa Farmers Market. Educational programming continues to

address the Pagosa community's interests, as volunteers organize the third ColorFest "Breakfast with Balloons."

The Community Garden Dome

Big decisions will be made when the Community Garden Dome is ready to grow in summer 2018. Various community groups plan to grow year-round in the new greenhouse. When operational, pre-measured bed space will be divided among committed groups, who have expressed interest for their "community." Examples may include a service organization growing for Loaves and Fishes, Vets for Vets growing for fellow veterans, or Archuleta Seniors growing for senior citizens.

The Community Garden Dome will function with an agreement to collaborate and self-govern, like any community garden. A volunteer coordinator will oversee operations. Participation in the Community Garden Dome adds a welcome component to the GGP project by increasing public access to the unique Pagosa Springs park.

The Innovation Dome

GGP's Innovation Dome will employ an integrated aquaponic system to grow both fish and vegetables. Water conservation defines the design that promises consistently high yields for local tables. The third greenhouse demonstrates controlled environment agriculture, closed to outside elements. The bio-secure facility ensures safe growing conditions by opening to the public for pre-scheduled educational purposes. The Innovation Dome serves as a revenue stream, allowing the nonprofit to approach its goal of economic sustainability.

Local restaurants and food services have expressed interest in purchasing food grown in the Innovation Dome. The timeline to operations is longer than that of the conventional Community Garden Dome, because of its more complex system, the sequence of its growing processes, and GGP's determining the buyers of the food. GGP guarantees that the nutritious food grown in the third greenhouse will be enjoyed by Pagosa citizens.

Outdoor Landscaping

Outdoor landscaping plans promise keep GGP's volunteer community busy for years to come. Both ornamental and seasonal food gardens are planned. The landscaping of the Rotary Garden is underway in 2018. East of the Education Dome, between the Town of Pagosa Springs bathroom and the River Walk, Divine Designs International is placing stones to define a terraced garden. The Rotary Club of Pagosa Springs granted the Geothermal Greenhouse Partnership ample funds for execution of this professional design. Two Rotary benches are being installed in the garden, as plant selection is underway.

What's Next?

GGP's volunteers are eager to ensure smooth operations of the two new greenhouses. The Pagosa Springs community is encouraged to visit the project. The GGP is "growing food and community with local energy!" Visit www.pagosagreen.org to learn more about this dynamic community project, get involved and support the nonprofit. Contact us at ggp@pagosagreen.org.