LAS VEGAS DEMONSTRATION &TRAINING FARM

2021 SEASON



John D. Martinez, County Extension Agent

Leonard Ludi, Farm Manager

Report & Photos Collected By: Karlee Rogers, Program Coordinator

NMSU Cooperative Extension Service

2021 LV D&T Farm Activity log

Early April 2021:

The water pump purchased for our two 5,000 gal tanks was installed by Leonard. The pump helped us efficiently fill our tanks from the acequia. We started our 2021 season with two full tanks of water. (June 22nd our water rights became restricted due to water scarcity) Luckily the monsoon started in full effect, allowing access to the acequia before water was an issue.



April 25, 2021

Community Beds

Leonard planted three raised garden beds designated to the participants. These community beds consisted of (1) golden beets, white onion, carrots, (2) Sweet peas, cucumbers, marigolds, (3) Española Improved green chile, and MORE marigolds! The third community bed with chile and marigolds was planted with the intention of participants transplanting into their own raised bed, which they did.







May 14, 2021

Three Sisters Planting

With the suggestion of Tim Vos, we as a team (Leonard, Karlee and Michael Patrick) planted a three sisters' trial, known as companion planting, maize, beans and squash. We planted a variety consisting of Isleta Blue Corn, Bolita Beans, and Calabacita mexicana using drip system irrigation.



May 15, 2021

Introduction Day

Introduced Las Vegas Farm crew to interested participants (19 attended). Explained the overview and goal the farm is aiming for. Michael described how the program was established and where funding originated. We reviewed farm guidelines & gave a farm tour.





Workshop One: May 29, 2021

Getting Started

Guidelines were signed & submitted, as well as payments of \$25 per participant were collected. A short PowerPoint presentation was given, covering the basics you would need to get your own 32 sq. ft. farm started in your own back yard. Workshop agenda:

- Plan Your Garden
- Location
- Raised Bed Materials
- Planting Dates
- Soil Preparation
- Room to Grow
- Pollinators



Workshop Two: June 5, 2021

Raised bed Construction, Transplanting & Seeding

11 beds were constructed with the guidance of Leonard & assigned to our participants (14 total raised beds). This was an outdoor demonstration workshop. Chile plants and Marigolds were transplanted from the community beds to participants beds. Variety of seeds were put into the ground, each chosen by participants to their wants and desires. Some participants started the construction of their beds on June 4th. Workshop agenda:

- Raised Bed Construction & Preparation
- Transplanting
- Seeding







Participant Andres Aragon and San Miguel County Extension agent John Martinez planted three rows of sweet corn aiming for success in row crop seeding. (Designated to all participants to tend and harvest from)







Workshop Three: June 19,2021

Drip System Installation

Each participant was guided by Leonard to properly install drip system irrigation to their raised bed. We also went over how to properly cultivate and distinguish weeds from seedlings. Participant Alfredo Maestas cut & prepped each drip valves/hose for all raised beds ready for installation Workshop agenda/ subtopics:

• Drip System Irrigation

- o Benefits of Drip System Irrigation
 - Saves Water- Designed to conserve soil nutrients and to minimize or prevent water waste.
 - BOTTOM LINE best option for scarce water availability
 - Extends Time that Plants Get Water
 - Prevents Weeds from Taking Water and Soil Nutrients from Plants
 - Proper Way to Prevent Plant Diseases
 - Too much water can encourage the development of fungal diseases, other diseases, pest, and insect problems.
 - Easily Adaptable
 - drip irrigation systems are designed for easy adjustments or modifications.

• Installation

• Tools you will need.

- Soaker Hose Eco-friendly, usually made from recycled car tires.
 - The hoses can last 5-10 years, if not longer.

• How to Cultivate (Control) Weeds

o Do not pull weeds too soon, they can easily be mistaken for a seedling



June 25, 2021

Leonard, participants: Andres, John and Dylan dug the hole which they placed a tee to install an alfalfa valve for access to flood irrigation vs. drip irrigation.







Workshop Four: July 17, 2021

Furrow Cultivation & Pest control

We worked together as a group to cultivate our corn furrows properly and efficiently. We also demonstrated how you can use fire ash (charcoal) to diminish the presence of squash beetle, as well as set a trap to catch unwanted pocket gophers. Workshop agenda/subtopics:

- How to Cultivate (Control) Weed in Furrows
 - \circ $\;$ Do not pull weeds too soon, they can be easily mistaken for a seedling.
 - Utilize tools to maintain efficiency.

 A garden hoe is a great tool to use, enables you to weed around small, tender seedlings and plants without damaging them (and without having to get on your hands and knees).

Pest Control

- Using fire charcoal to diminish squash beetle.
- Setting traps to catch unwanted pocket gophers.







July 20, 2021

Our second storage container shed was delivered and placed by Malloy's. This container is being used to store all gasoline powered equipment.







Workshop Five: July 31, 2021

Guest Speaker: Tim Vos- NMSU

Tim Vos gave an AWESOME and very thorough presentation on the benefits of regenerative agriculture and how to take the proper steps to maintain a successful harvest. Workshop agenda:

- Guest Speaker: Tim Vos
- Workshop Starts at 8:00 AM

- Regenerative Agriculture = Old School Organic Farming
- Feed the soil: soil organic matter, microbial abundance, and diversity
- Picturing the Rhizosphere (the root zone)
- Crop rotations and multispecies cover crop mixes
- The indispensable value of agrobiodiversity
- Soil Health is the number ONE priority in regenerative organic farming



Pre- Workshop: August 14, 2021

Hoop House Planning

We held an organized workshop meeting to discuss participant availability to help put the event all together. To be successful with this project, group volunteer and effort needed. NMSU's Del Jimenez, he will be supervising step by step the process of erecting the hoop house correctly and in a timely manner.



Saturday: September 4, 2021

Participants helped prep & paint all lumber and material needed for the hoop house construction.



Hoop House Presentation: September 10, 2021

Guest Speaker: Del Jimenez

Del Jimenez provided hard copy slides providing exceptional information on Hoop Houses, what are they? What are they used for? What and when to plant in Hoop houses? Different styles/types, etc.



Workshop Six: September 11, 2021

Hoop House Construction Day

Supervised by: Del Jimenez

We obtained 25 volunteers (participants included) to successfully erect our 32 ft by 15ft Hoop House.















September 13 & 15, 2021

Ten new raised beds were constructed and placed inside the hoop house.



Workshop Seven: October 2, 2021 (Canceled)

Hoop House Planting

Guest Speaker John Garlisch, Bernalillo County Extension Agent

Unfortunately, the weather did not permit us to having this in person workshop, but John Garlisch provided us with some insightful information. With this we felt confident to attempt planting in the hoop house for a cold crop harvest, such as beets, turnips, cabbage, etc.



October 4-8, 2021: Bed Cleanup

End of summer session. At this time, we have already experienced frost and production has stopped. Participants used this week to clean out their personal beds by pulling root systems out and turning in soil.





October 18, 2021

New water line was trenched straight from the water tanks to the hoop house, bypassing the distribution box. This allowed us to dig deep enough to prevent the line from freezing and allow us to water during our winter season.



PRESENT: Fall/Early Winter Hoop House Days

Starting to see some germination, turnips and beets have been most productive at this point. Learning as we go!







Participant Harvest Pictures: 2021 Season



















