University of Arizona
Cooperative Extension
NAVAJO COUNTY
Annual Report 2021

Ciara Benally & Lambino at the Navajo County Fair, Holbrook. Relaxing after a day of showing.
This Annual Report summarizes the 2021 Navajo County Cooperative Extension programs and activities of 4-H Youth Development, Range and Animal Science, Family and Consumer Health Sciences, Supplemental Nutrition Education Programs, and Gardening/Home Horticulture. These programs provided grassroots education to Navajo County residents in 2021. In addition, 32 citizens served as Cooperative Extension volunteers. These valuable volunteers enhanced Extension programming by assisting in delivering relevant educational programs and information to many citizens and communities throughout Navajo County. The contributions of these volunteers totaled 2,816 hours of service with an estimated value of $80,370.

Cooperative Extension greatly appreciates the financial support, office space, and services provided by the Navajo County Board of Supervisors. Navajo County Cooperative Extension continues to leverage county contributions through collaborations and partnerships with many different organizations and groups.
Public Outreach and Ranch/Farm Visits
The most popular reason for a farm/ranch visit was pasture damage and erosion issues.
Additional farm/ranch visits were requested for:
- Toxic Plant Identification
- Tree/Shrub Identification
- Tree Insect and Disease Identification
- Forage Evaluation
- Farm Establishment Questions
- Wildlife Exclosure Information

Navajo County Fair Outreach Totals

Navajo County Fair:
Outreached to over 150 people
Answered questions on a wide variety of topics from pasture management to native plants.
Partnered with Master Gardeners, SNAP and 4H to staff the booth.
Handed out over 700 pieces of information on livestock health, invasive and toxic plants to livestock, livestock care, rangeland health and maintenance, and pasture management.

Navajo County Livestock and Range Cooperative Extension Impacts:

- Education on livestock care, treatment and necessities to new and current ranchers and farmers helped bring a new awareness around appropriate livestock care.
- Pasture Management outreach has helped landowners identify the correct forage for their specific livestock.
- ALIRT (Arizona Livestock Incident Response Team) Toxic Plant Fact Sheets have received over 11,000 views on the Cooperative Extension Facebook Page.
It has been a great year for the Hopi Federally Recognized Tribal Program (FRTEP). We have grown in many different directions. Many new programs that we have been working on in 2020 came to fruition this year. Please visit our website to see more detailed information on our programs.

https://extension.arizona.edu/hopi-tribal-extension-online

AGRICULTURAL PROGRAMMING

- In-person Hopi Livestock Seminar that focused on vaccination protocols for cattle and horses, low-stress handling, and record keeping. There were hands-on opportunities for people to practice on live animals.
- Partnered with the Hopi Farmers Market Committee, supporting the planning and implementation of this event. We also had an educational booth and garden demonstrations at Hopi Farmers Market held July 11, August 1, September 12 and October 3.
- In Fall 2021, we supported the Apache County SNAP-Ed staff with erecting a new hoop house on the Rock Point Community School campus. We have built 2 previous hoop houses on our current office site.

4-H & YOUTH DEVELOPMENT

- We reached 230 K-6th grade youth at Second Mesa Day School with 4-H education.
- We also reached 140 youth during an after-school program at First Mesa Youth Center with virtual garden sessions.
- In Fall 2021, we taught 21 youth, K-8th grade of the Peace Academic Center every week, garden classes which includes sessions in the garden.
- We’re working with Hopi Day School Parent Group to lead sessions on gardening and fruit trees located on their campus.

Hopi FRTEP Impacts

- Developed an on-line presence for our programming. Topics include a poultry series, equine series, gardening workshops (topics were garden planning, Herbs, Soil Preparation, Potting Soil, Garden Calendar, Seed Starting, Container Gardening, and Passive Solar Greenhouses), Arizona Beef Quality Assurance training.
- In January the new Hopi 4H Club was chartered and launched. We currently have 4 members and 2 adult volunteers. We offer the Hopi Healthy Living Project and STEM Lego Mind Storm Coding Project.
There were 50 entries into the open class building of the Navajo County Fair by 12 members of 4 clubs, including four Cloverbuds. Exhibits were for entomology, photography, outdoor adventures, sewing poultry/embryology/egg production, welding, drawing, string art. FRTEP agent Susan Sekaquaptewa judged all the exhibits and she and program coordinator Bev Goodnight checked in the kids and helped put ribbons on the entries. There were 97 large livestock members (4-H and FFA) entered 9 goats, 16 lambs, 11 steers, and 77 pigs. Seven small stock members showed 2 cavy (guinea pigs), 9 poultry/ pigeon, and 6 rabbits. There were 25 horse members that participated in Western showmanship, gymkhana events and ranch horse events.

**Because of Navajo County 4-H:**

- 115 market livestock members (both 4-H and FFA) learned quality assurance principles which taught them about the quality of the meat and food products derived from their animal project.
- 84 members completed demonstrations expressing the knowledge that they have learned about their project during the year.
Public Outreach:

- Public Outreach occurred in the fields of School Health and Wellness, Early Childhood, Food Systems (gardens, food banks)

- Direct education events provided to: Holbrook Head Start, Hulet & Park Elementary, Blue Ridge USD, Toddlin’ Jackets, Blue Ridge Head Start

- School based trainings including Physical Activity Leader Training, wellness policy, WellSAT, and CATCH to support health and wellness in our schools.

Family and Consumer Science Impacts:

- 2 new Childhood gardens established, 4 Childhood Gardens renewed and replanted.

- Conducted the Physical Activity Leader Training that was open to all tribal schools in Apache and Navajo County in collaboration with Department of Education and Winslow Indian Health Care
The BR UA 4-H Fab Lab is the result of a partnership between the Navajo County Cooperative Extension of the University of Arizona and the Blue Ridge Unified School District. The facility is a fabrication laboratory, or Fab Lab, located in Pinetop Lakeside. Functioning as an "open door open source educational resource", it includes several classrooms designed for STEAM (Science, Technology, Engineering, Art and Math) work. This Lab is the first and only public school fab lab in Arizona and one of the most comprehensive school based makerspaces in the state. It is a 7,500+ square foot facility offering a large selection of digital fabrication equipment and machines including: Fifteen 3D printers, 2 laser engravers, electronic and soldering work stations, vinyl printers and much more.

The Lab is being used for normally scheduled classes, including Digital Fabrication and Conceptual Physics and Engineering. Afterschool programs and clubs offered as part of the 4-H STEM programs for HS students include:

- Physics and Engineering Club
- NASA Rover team
- Solar Go Kart Team
- CubeSat team
- JH 4-H physics and Engineering Club
- Samsung Solve for Tomorrow STEM team.
- Rocket Science and all things RC (students learn aeronautical engineering concepts by designing, building and flying scratch build RC aircraft,
- Digital Photography/Printing

BR UA 4-H Fab Lab Impacts:

- 2021 SARSEF Race the Sun, "Innovation" Award Winner and Second Place in the "Solar Efficiency" challenge for the Maker Class.
- 2021 Blue Ridge JH 4-H Physics and Engineering Club earned a Honorable Mention, top 100 in the 2021 Samsung Solve for Tomorrow Challenge.
Currently, there are 11 Navajo County Cooperative Extension employees located in Holbrook, Lakeside, and Kykotsmovi, Az. They are:

Mike Hauser - County Extension Director, 4-H Youth Development and Agriculture Agent
Margine Bawden - Family, Consumer and Health Science Agent
Anita Thompson - Range and Animal Science Agent
Susan Sekaquaptewa - Federally Recognized Tribal Extension Agent
Yvonne Kaye - Program Assistant / FRTEP
Chris Paxman - Program Assistant / Media Specialist
Beverly Goodnight - Administrative Assistant
Cathy Bawden - Administrative Secretary
LaVerne Vinyard - Business Manager
Lisa Reidhead - SNAP-Ed Community Outreach Manager
Rhonda Liddle - SNAP-Ed Community Outreach Assistant