

## **Educational Objectives**

The “AZ 4-H Ag at Home” program was created to re-engage youth and provide virtual learning while encouraging as much “hands-on” engagement as possible in this new, unplanned quarantine environment. With all normal 4-H face-to-face activities canceled (March 13, 2020), UArizona extension faculty became innovators to provide life-long learning opportunities that were attractive and engaging to 4-H members. The 4-H youth enrolled in livestock, equine, and small stock projects were the hardest hit audiences. Their key components of the 4-H experience, in-person education and events allowing youth to showcase their animal project efforts (shows and fairs), were all canceled. Developing virtual options became more key when in-person restrictions extended on (still almost completely virtual as of 3/15/21).

## **Program Activities and Teaching Methods**

1. **The AZ 4-H Ag at Home program theme is “Learn-Do-Teach”** Youth learn a skill, master it, and then teach another in their quarantine pod. Beginning in March 2020, Greene worked with several Ag and 4-H agents across AZ to create short, simply edited videos centered around useful animal/plant topics which could be learned/practiced at home. These videos focus on a “hands-on” activity youth could do with items easily obtained around their house/ranch. Videos still average 5-10 views per week.

<b>Video Title/Content Creator (Recorded Views as of 3/15/2021)</b>	<b>Length min:sec</b>	<b>Rec. Views</b>
<b>Quick Release Knot</b> - Ashley Wright, UArizona Livestock Area Agent	2:46	67
<b>Grooming your Horse</b> - Dr. Betsy Greene, UArizona Horse Extension Specialist, and Ashley Wright	22:45	73
<b>Building a Nipple Drinker for Chicks</b> - Ashley Wright	12:57	194
<b>Deworming your horse</b> - Grey Farrell, UArizona FRTEP Agent	5:43	83
<b>Pumpkin: Planting Basics</b> - Juan Arias, UArizona FRTEP Agent	3:19	248
<b>DIY Watering Container</b> - Juan Arias	4:44	63
<b>Haltering Horse: Training Tips for Developing Trust</b> - Grey Farrell	9:17	213
<b>Making Hand Sanitizer</b> - Elisabeth Alden, UArizona FRTEP Agent	9:02	72
<b>Spinach Planting Basics</b> - Juan Arias	3:04	24

2. **AZ 4-H Ag at Home expanded to include a webinar series (October 2020).** Targeting 4-H youth, leaders, volunteers, the webinars focus on agricultural animal projects. Each webinar covers 40-45 minutes of animal science information with an actionable component presented by experts in the field (moderated by co-creators Dr. Betsy Greene and Ashley Wright). The webinars close with an AZ 4-H agent or volunteer presenting available opportunities in that AZ 4-H animal project (5-10 mins). Webinars were promoted through emails to AZ 4-H lists, through agents, and on social media. All live webinars are recorded and posted on the **AZ 4-H Ag at Home** webpage. Seven initial webinars have been completed to date, with five more scheduled through May of 2021. Participants who attend and evaluate at least five webinars will receive a T-shirt with the **AZ 4-H Ag at Home** image at the conclusion of the webinar series.

- We used the Zoom “webinar” feature to prevent distractions and provide a measure of security to protect youth while participating online: participants are unable to unmute/turn on their video. Participants can use the chat and Q&A features to communicate with panelists and other attendees, and panelists can monitor all communications between participants (private messaging is not allowed).
- We ensured that we had at least two moderators/question wranglers to moderate the chat and Q&A, introduce the speaker, facilitate during the webinar, and provide webinar ground rules (no harassing behavior in the chat, use the Q&A for questions, etc.).
- Program cost has been very low as we utilize existing software subscriptions (Zoom and Qualtrics) and leverage our connections around the nation to bring in expert speakers. The only costs incurred are for the incentive prizes, which are estimated at approximately \$300 (\$7.50 per T-shirt). Prizes were funded from monies Dr. Greene generated. Other options for funding could include a donor or sponsor. All planned and past materials are accessible at: <https://extension.arizona.edu/az-4-h-ag-home>

Webinar Topic and Description (Recorded views as of 3/15/2021)	Live Views	Rec. Views
<b>November 19, 2020: Rabbits</b> - Rabbit Hemorrhagic Disease (Dr. Peter Mundschenk, AZ State Veterinarian), Biosecurity for 4-H Rabbit Projects (Ashley Wright, UArizona Livestock Agent), 4-H Rabbit Project (Renee Carstens, UArizona 4-H Agent)	60	44
<b>December 3, 2020: Swine</b> - Swine Basics (Dr. Colt Knight, University of Maine State Livestock Specialist), 4-H Swine Project (Ashley Jeffers-Sample, UArizona 4-H Agent)	51	65

<b>December 17, 2020: Horse</b> - Horse Disease Transmission (Dr. Betsy Greene, UArizona Horse Extension Specialist) Biosecurity at Horse Shows/4-H Horse Project (Maddie Officer, AZ 4-H Alumnus)	27	92
<b>January 14, 2021: Chickens</b> - Eggcellent Eggs (Ashley Wright) and Poultry Project (Josh Moore, UArizona 4-H Agent)	122	32
<b>January 28, 2021: Beef</b> - Beef in the Desert (Ashley Wright and Ashley Jeffers-Sample), Beef 4-H Project (Ashley Jeffers-Sample)	59	21
<b>February 11, 2021: Horse</b> - Hay Quality (Dr. Krishona Martinson, University of Minnesota Extension Horse Specialist)	46	19
<b>February 25, 2021: Sheep</b> - Wool Production and Judging (Dr. Joslyn Beard, University of Nebraska), Sheep 4-H Project (Josh Moore, UArizona 4-H Agent)	56	
<b>2021 webinars:</b> 3/18 (turkeys), 3/25 (goats), 4/8 (cavies), 4/22 (TBD), 5/6 (TBD)		

### **Program Results and Evaluation:**

The evaluation for each webinar contains the following questions. Answer descriptors and what is reported in the table are indicated in the parentheses for each question.

**Question 1.** I found this information useful in the management/care of my animals (% strongly agree + agree)

**Question 2.** Based on this information I plan to make at least one change in my animal's daily care, vet decisions, and/or farm operations (% strongly agree + agree).

**Question 3.** Before this presentation I knew... (1 = very little to 5 = very much; average)

**Question 4.** After this presentation I know... (1 = very little to 5 = very much; average)

**Average Knowledge Change (AKC).** Average Knowledge Change = (Q4 minus Q3)

<b>2020 Webinars</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>AKC</b>
<b>Nov. 19 (Rabbit)</b>	90%	83%	2.42	4.33	1.91
<b>Dec. 3 (Swine)</b>	82%	90%	2.36	4.27	1.91

<b>Dec. 17 (Horse)</b>	100%	100%	3.13	4.25	1.12
<b>Jan. 14 (Chicken)</b>	100%	89%	3.05	4.41	1.36
<b>Jan. 28 (Beef)</b>	100%	72%	2.82	4.27	1.45
<b>Feb. 11 (Horse)</b>	100%	88%	3.38	4.13	0.75
<b>Feb. 25 (Sheep)</b>	93%	55%	2.50	4.00	1.50

### **Program Impact Statement**

This has been one of the more successful virtual 4-H programs in Arizona. One challenge Arizona 4-H faces is that many youth have continued to participate in state shows and fairs, while 4-H remains virtual only. Youth, parents, and volunteers have expressed that they feel as though Arizona 4-H abandoned youth involved in traditional animal projects when they canceled 4-H participation in live activities and have yet to resume in-person. We focused on participant engagement and applicability of content and have successfully drawn in a 4-H audience that was resistant to online participation. Each webinar has a significant number of repeat attendees, and the evaluations indicate the programs are creating an impact with youth across the state and beyond. Our goal is for this program to encourage life-long learning, re-engage youth with our traditional animal projects, and increase 4-H enrollment post-COVID.