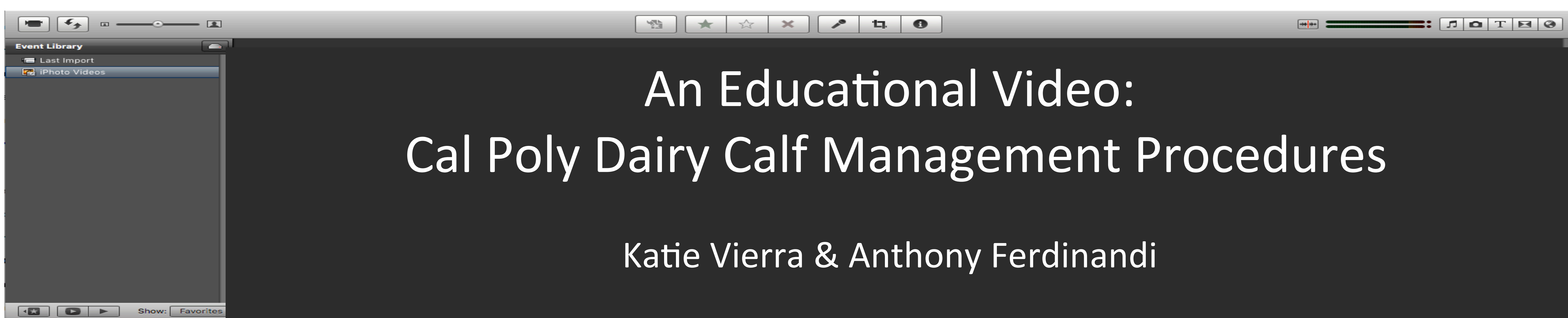


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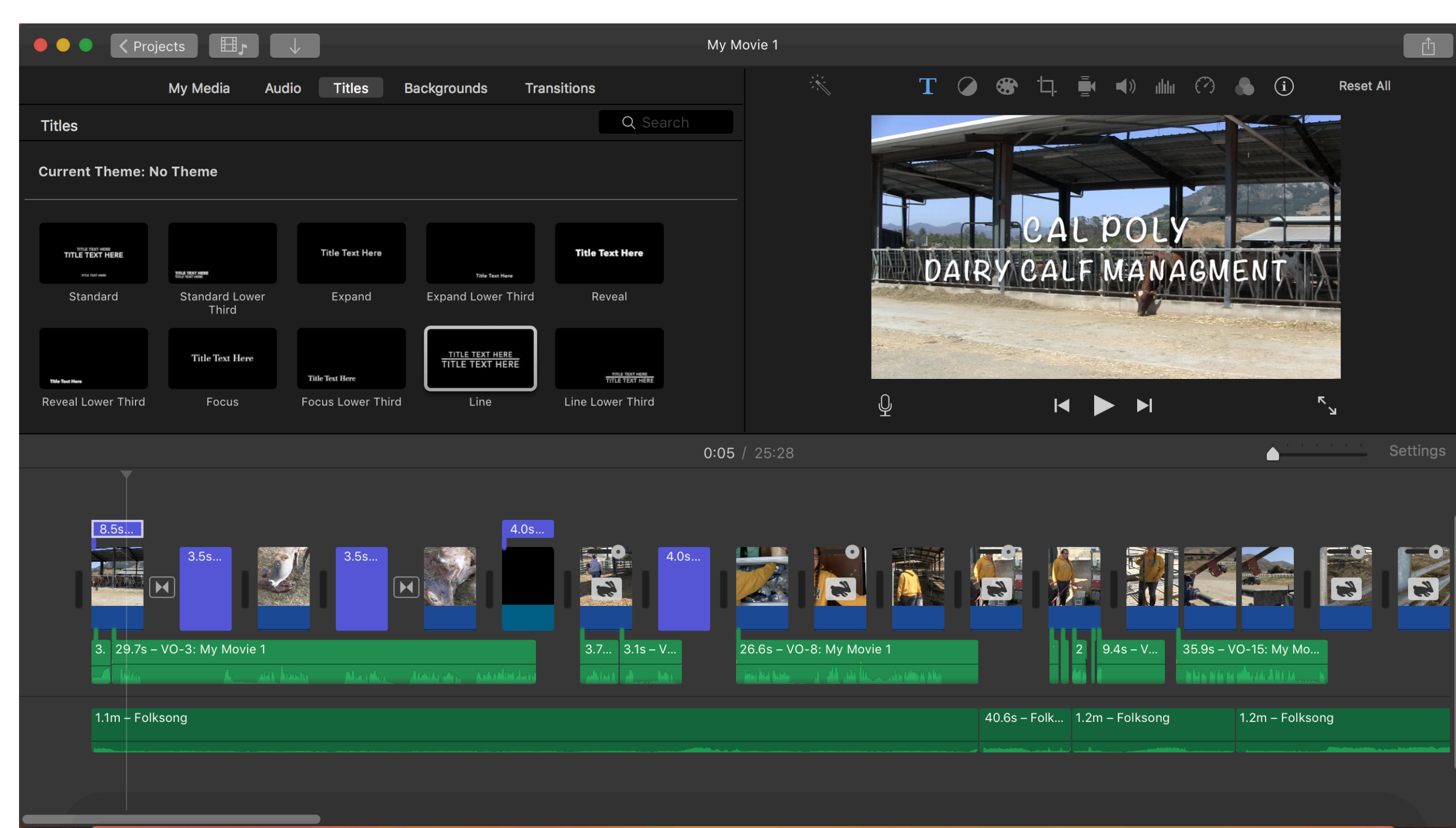
An Educational Video: Cal Poly Dairy Calf Management Procedures

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Introduction

Successfully raising dairy calves is not only time consuming, it also contributes to the future of the herd. There are several factors contributing to dairy calf management immediately after birth and onward, important to properly care for a cow and calf. Knowing what issues to address in what order becomes critical. Students often lack confidence in completing the tasks required, including the type of colostrum that is fed, medications needed, and overall proper nutrition. These factors make for a healthy survival rate in dairy calves (Penn, 2016).

Currently, the Animal Science Department at Cal Poly, San Luis Obispo, offers a Dairy Calf Enterprise. This enterprise allows students to get hands-on experience with the newborn calves and requires immediate attention to procedures instantly after a calf is born. The purpose of this project is to produce an instructional video regarding Dairy Calf Management.



Results & Discussion

The outcome of this educational video proved successful. Research was conducted to understand the crucial steps for dairy calf management and it was important to advocate to students the importance of proper dairy calf management. Students were educated on the processes and procedures needed for a future healthy herd. Essentially, a tutorial video was created where students will have the opportunity to watch and learn the step-by-step process of dairy calf management at the Cal Poly Dairy. A downloadable tutorial video file that gives students the opportunity to go back and view it if they are unclear on certain procedures will be provided to students enrolled in the course.

Changes to enhance video quality would be to incorporate other video equipment such as a stabilizer, tripod and microphone. Additional modifications include using Final Cut Pro for a more detailed video editing system instead of iMovie. Furthermore, adding more video footage of multiple calves being born could solidify essential handling procedures as well as taking into consideration the procedures of managing a bull calf. Lastly, improving the video quality by a higher resolution camera and a better video editing system would be imperative.

The Dairy Calf Management video will be made available online. The professor of the Dairy Calf Enterprise will be in possession of the video in order to aid students to visually understand how the process of calf management should be executed properly. This video is meant for instructional purposes at Cal Poly, as it's specific to the university dairy. It is not recommended to post online for public viewing.

Method

The video process began with meeting Rich Silacci and included input from the Dairy Science Department and student peers in the Dairy Calf Management Enterprise. Renting a video camera at the Cal Poly Technology Center was necessary to film live footage and moving shots of newborn calves. Filming the actual process was vital. Once born, the calf remained with its mother until all camera equipment and settings were adjusted and set up. After 30 minutes, the calf was moved to a separate pen, and mother was moved into the hospital pen to be taken care of and milked. Filming took place as the calf underwent vaccinating, navel dipping and ear tagging. The video also shows how to make sure the calf has a warm bed of straw and instructs to put a frozen bag of colostrum in the pasteurizer (UMass, 2016).

Video compilation was the last step of methodology. All footage was downloaded onto a USB and uploaded to a reliable desktop. Disregarded video segments without purpose and place significant footage out in the correct order of calf care steps. Lighting, voice recording and fluidity of the selected videos were important factors to consider for quality video completion (Fauer, 2001). All video footage was imported to iMovie and edited until a desired video was obtained. The completed tutorial and instructional video was exported to .mov compatible file type and shared with the enterprise advisor so future Dairy Calf Management enterprise classes can learn from it.



"Dairy Calf Management Class." *Department of Veterinary and Animal Sciences at UMass Amherst*. UMass Amherst. 2016. Web. 23 May 2016.

"Calves (Dairy Cattle Nutrition)." *Dairy Cattle Nutrition (Penn State Extension)*. Penn State Extension. 2016. Web. 23 May 2016.

Fauer, J. (2001). *Shooting Digital Video: DVCAM, Mini DV, and DVCPRD*. Woburn, MA: Focal Press.