

Where's the Ch

VIRTUAL REALITY Brings Poultry Science to the Community College

BY MARCIA OWENS KLOEPFER, ED ZWEIACHER, PAT CURTIS AND AMANDA EVERT

It is very difficult, if not impossible, to schedule tours of real-life food processing facilities. Eagle Island, located in Second Life, provides an opportunity to tour such a facility—virtually. It exists to provide interaction in real time, around the clock, for global accessibility. The Eagle Island design provides a more engaging learning experience than a traditional brick and mortar campus setting. It is a collaborative effort between Auburn University (AU), in Alabama, which has a designated Department of Poultry Science, and Redlands Community College (RCC), in El Reno, Okla-

homa, which has an innovative animal science program, but no poultry. Collaboration between the two institutions (which are about 838 miles apart) has given RCC students an opportunity to learn about the poultry industry virtually—RCC utilizing Eagle Island to augment classroom presentations and encourage critical thinking. Though Eagle Island was built based on the design of real facilities, some creative liberties were taken.

The Guided Tour

Before taking the tour, RCC students prepare for the experience by being informed

of the virtual world simulation, and are given the opportunity to acquire an avatar of their own so they may participate “in world” also. They read and review a poultry chapter in the *Introduction to Animal Science* textbook, watch the DVD “Virtual Chicken,” and have an assignment of coming up with three to five pertinent questions about the poultry industry—one of which will be asked during the tour and answered by experts while on Eagle Island. The “Dawghouse” movie is also shown “in world” prior to the virtual tour itself.

The tour provided by experts of AU

Chicken?



PHOTO BY ISTOCK.COM

begins with the Microlab—which is based on an active research lab at AU. You can learn about food safety, recalls and alert information here. “Eduboard” provide some information about topics such as E. Coli and Salmonella bacterium, and a virtual microscope provides a glimpse of bacterium. Eagle Island provides the visitor with a free virtual lab coat to keep and wear whenever he or she chooses.

The Processing Facility shows the complexity of engineering that is needed by the industry for safe and proper delivery to the retail store. Signs are placed about this area to describe each step. Included

is information about federal inspectors who work on site to ensure the food meets government mandates and laws, and the systematic approach to the identification, evaluation and control of food safety hazards. Because no two processing facilities are identical, creative liberties were taken to depict a processing line.

Have you ever wondered about what happens on the inside of a hen that enables her to lay an egg? The Virtual Chicken Amphitheatre shows the video: “Virtual Chicken: Phase 1, The Female Reproductive Tract of a Hen.” Created at AU, this anatomically correct educa-

tional resource was created by a USDA grant. Scientists and scholars provided expert information from a teaching point of view, and technical professionals used technology to create this tool for end-user accuracy.

The Virtual Chicken Museum complements the movie. These are larger-than-life 3-D models of the oviduct and various stages of the development of the egg. The museum is amazing to see for all its educational value, but also for the efforts that have gone into this project by the technical developers and minds of the faculty and staff involved.

Egg Processing Facility and the Research Unit

The Egg Processing Facility is based on an egg-breaking business in the Eastern United States. It shows incoming flats of eggs, and how they are moved through the washing, candling and quality-check room. You probably know how to break one egg at a time. Have you ever thought about how hundreds of eggs are mechanically broken? The virtual egg-breaking room highlights the way this can be done at a very high speed.

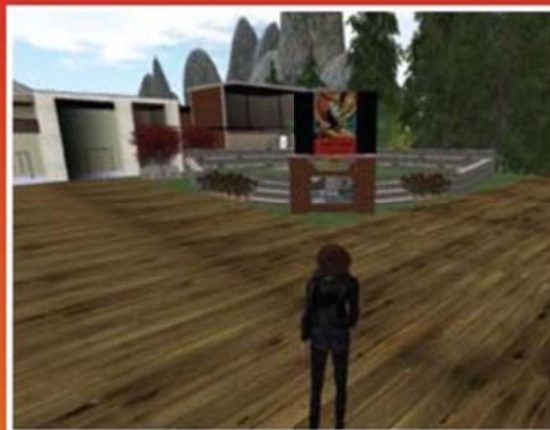
Institutions across the United States continue to do research for safe, wholesome and high-quality products. On Eagle Island it is called the Research Unit. The buildings have been modeled after poultry houses. You may have seen them while driving down a road. Generally they are surrounded by dense forest or high berm for biosecurity reasons.

Other Resources, Places to Visit

Virtual worlds would not be complete without some way to link to Web resources outside. Platforms with signboards share URLs that can be accessed from a browser window. Those sites included on the platforms support the purpose of Eagle Island. LOI Hall (Landmarks of Interest)

allows us to showcase other Second Life places that compliment Eagle Island. Our Beach was specifically added because we all need to get away every now and then and it can be a nice setting for some casual yet academic discussions. Gathering and communicating are encouraged on Eagle Island, where there are meeting spaces

These are snapshots taken from Eagle Island located in the virtual community Second Life.



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MrE's Lodge has already hosted some lively discussions between RCC and AU. It is here that MrE is moderator and host to his RCC students and faculty, and technical professionals from AU. A visit to the Red Roof Dawghouse will enable you to view the poultry processing video. This is the work of a professor from a third university. It is with permission and in his honor that the "Dawghouse" was built.

An Integral part of Classroom Learning

During and after the tour, which is a two-hour session held during the regular class time, students are able to "step up" to the microphone to ask questions about the poultry industry in general, or about something specific pertaining to a segment of the Eagle Island facility. These questions are answered by the faculty and staff at AU.

A total of four desktops, each with a headset and microphone, are used for the tour. One desktop is used by RCC and a room projector. Three desktops are used by AU. An interactive learning environment is developed throughout the entire presentation in a fun and casual way. This activity is scheduled early in the semester because the students talk about the experience and information for the remainder of the course. The RCC students enjoy this experience in their "Introduction to Animal Science" class as much or more than any of the other experiences.

Learning to Navigate a Virtual World

The Eagle Sculpture on the southwest corner of the island is a clear landmark for the Welcome Area. This is purposefully wide and spacious because we understand and remember what it was like when each of us was a newbie in Second Life. It is here we can help new Second Life users to learn to navigate and communicate in this virtual world. Whether your avatar is one day old, or one year old, the purpose is to make you feel comfortable, allow you to move about

this space as you wish, and provide you with information about food production and safety that may make you sit back and say, "I didn't know that."

Learning and Sharing: The Power of Virtual Worlds

We hope you visit Eagle Island soon. If you have any questions, please feel free to drop a note to Marcia Kjeller or MrE Raynier. You may see Patti Tigerpaw or Win Ellison "in world" also. If you find us on Eagle Island, we would love to meet you, chat with you and show you around the Island. Eagle Island is an ongoing project with more educational components to be added in the near future. We hope your Second Life experience will be as educational as your real life. **I**

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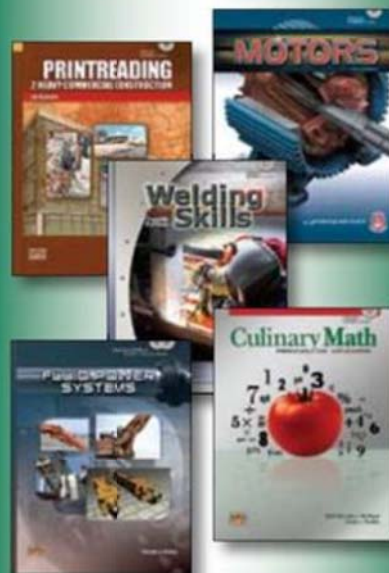
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To visit Eagle Island, go to <http://slurl.com/secondlife/Eagle%20Island/232/18/28>.

ACTE Interested in exploring this topic further? Discuss it with your colleagues on the ACTE forums at www.acteonline.org/forum.aspx.

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