

RUTGERS UNIVERSITY

EQUINE SCIENCE QUARTERLY



From Our Stable To Yours

Winter 2016

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Anniversary!

Lord Stirling Stables: The History Of A “Revolutionary” Location In New Jersey

Lord Stirling Stable, the 2015 recipient of the “Gold Medal Horse Farm” award, is a 450-acre equestrian facility located in Basking Ridge New Jersey.

One of only three county owned and operated equestrian facilities in the state, the property’s history dates all the way back to the Revolutionary War.

A part of the much larger Lord Stirling Park run by the Somerset County Park Commission, the land was originally part of the estate of William Alexander (established in 1761).

Alexander, who petitioned the English House of Lords for the title of “Earl of Stirling”, was eventually given the title “Lord Stirling” (which is what gives the park, and stable, its name today).

Alexander was not only a Major-General in the Continental army, but he was believed to be a close personal friend of George Washington himself.

There are accounts that Washington visited Alexander’s estate on multiple occasions during the revolutionary war, and was so close to Alexander that Washington gave away Alexander’s daughter at her wedding.

During the years that followed the farm was sold and purchased multiple times.

“At the end of WW II, the Astor family established a well-known dairy operation and stable,” said Margie Margentino, manager of Lord Stirling Stable. “The farm housed five different breeds of dairy cattle. All of the animals were very well bred, and Mr. Astor enjoyed crossing the different breeds to see how he could improve the quality and quantity of the milk produced.”

Around 1912 the use of the farm would yet again change. John Jacob Aster, IV perished at the age of 48 on the Titanic.

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From The Clubhouse



Looking forward to
upcoming events -
there are so many
ways to visit with
the Equine
Science Center

Dear Friends,

Winter is finally here, darn it! I was getting spoiled being able to enjoy all of my usual outdoor activities in spring-like weather conditions. Hopefully we will be spared sub-zero temperatures and tons of snow. For tips on taking care of your horses during the winter months [click here](#).

The fall semester is usually our busiest time of the year and this one was no exception. In November we hosted a lecture and book signing by Wendy Williams, who enthralled us with stories and images from her world-wide travels as she studied horses around the globe in preparation for her wonderful tome, *The Horse: The Epic History of Our Noble Companion*. Thanks to Julia Peterson for sponsoring the pre-lecture reception.

Our "Evening of Science and Celebration" proved to be both, in that we featured Dr. Carolyn Stull, from the University of California – Davis, who discussed the difficult topic of making the decision to euthanize a horse. Dr. Stull's lecture was sponsored by Mid-Atlantic Equine Medical Center. Center faculty and students presented updates on their respective research funded in 2015 by the Center and I look forward to their continued progress and ultimate results. Visit the Lab Notes on [page 6](#)!

We also honored Lord Stirling Stables with the Gold Medal Horse Farm award for their commitment to environmental stewardship.

Margie Margentino, her staff, and the Somerset County Park Commission have done a fabulous job implementing many of the BMPs identified by Mike Westendorf, Carey Williams, and Laura Kenny. Kyle and I visited the stable in the fall and viewed many of the improvements made to improve environmental stewardship – from horse back! Congratulations folks. See the feature story on [page 1](#).

Congratulations to Laura Kenny who successfully defended her Master's thesis in brilliant fashion. Many of you know Laura and have heard her speak at our events about her research on the value continuous versus rotational grazing for horses.

Because of our busy fall schedule we held off on holding our annual stakeholder meeting until December 16. Held in conjunction with the monthly New Jersey Equine Advisory Board meeting, Center faculty and staff heard from constituents on a variety of topics as we reaffirmed our focus areas of horse health, land use, environmental stewardship, integrity of equestrian sport, and sustainability of the equine industry. We ended the meeting with a festive lunch provided by the Center.

During winter break the Center sponsored two Douglass externs. Caroline Upwood and Julie Wang are first year students who were interested in finding out what the Equine Science Center is about. They spent 5 days tagging along with Center faculty and staff and from the smiles on their faces I guess they enjoyed the time spent with us.

In closing, I would like to congratulate the 2016 Horseperson of the year, Judy Hennessey. Judy has been a successful 4-H club leader and coach of the National 4-H Roundup teams for over 40 years. Her success in positive youth development is second to none.

Looking forward to seeing many of you at the 2016 Horse Management Seminar. Carey Williams has put together a great program on behavior and training of horses; see you on Valentine's Day!

For information on the seminar see the story on [page 8](#).

All the Best,
karyn

PARTNERS



New Jersey Farm Bureau's primary purpose is to represent the overall interests and improve the financial well-being of farmers and our \$800 million industry. NJFB activities are supported through voluntary membership and annual dues. Members have access to:

- Staff assistance on farming issues and regulatory problems.
- Educational workshops on topical issues such as farm labor, wildlife damage, and zoning.
- Weekly updates on legislation news and regulations affecting all aspects of farming.

It pays to be a NJ Farm Bureau member! For a full list of membership levels and benefits, or to sign up, visit: www.njfb.org.



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In addition, owning over 810 acres of land for the development of new sites. It is our mission as a company to provide the best quality affordable home for the hard working residents of Pennsylvania.

UMH communities are perfect for residents of all ages, let us help up you find your dream home today.

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The New Jersey Department of Agriculture (NJDA) is an agency which oversees programs that serve virtually all New Jersey citizens. One of the Department's major priorities is to promote, protect and serve the Garden State's diverse agriculture and agribusiness industries.

In addition to the programs we offer to support production agriculture, NJDA also manages programs that feed schoolchildren, distribute surplus federal foods to soup kitchens and pantries that serve our needy citizens, conserve precious soil and water resources, protect farmland from development and preserve it for future agricultural use, expand export markets for fresh and processed agricultural products, and promote our commercial fishing industry, and administer the complete program of agriculture, food and natural resource education, which includes the State FFA Association.

For more information about NJDA, please visit: www.nj.gov/agriculture



Merial recognizes that diseases pose a significant threat to the health and well-being of horses, and that's why Merial is at the forefront of supporting horse owners and veterinarians in their efforts to keep horses healthy.

In addition to providing a wide array of vaccines and pharmaceutical products for horses, Merial engages veterinarians and horse owners in educational programs and online tools to build a greater awareness of diseases and the importance of prevention.

These resources, along with industry-leading products enable us to help veterinarians and horse owners keep horses healthy.

UPCOMING 2015 EVENTS

Horse Management Seminar: Equitation Science

Sunday, February 14, 2016

G.H. Cook Campus Center
Rutgers, The State University of NJ
New Brunswick, NJ

CWilliams@aesop.rutgers.edu

Junior Breeders Symposium

Saturday, April 2, 2016

Former Agricultural Museum of NJ
Cook Farm
Rutgers, The State
University of New Jersey
New Brunswick, NJ 08901

CWilliams@aesop.rutgers.edu

Ag-Field Day Part of Rutgers Day

Saturday, April 30, 2016

Red Barn - Cook Farm
Rutgers, The State
University of New Jersey
New Brunswick, NJ 08901

ESC@aesop.rutgers.edu

The Equine Science Center's Summer Showcase

Wednesday, July 13, 2016

Red Barn - Cook Farm
Rutgers, The State
University of New Jersey
New Brunswick, NJ 08901

ESC@aesop.rutgers.edu

For more events, visit our website @ esc.rutgers.edu

Lord Stirling Stable: A Historic



Rutgers Equine Science Center staff enjoying a beautiful fall day, with friends, at Lord Stirling Stable. Pictured left to right: Dr. Karyn Malinowski, Director of the Equine Science Center at Rutgers University; Bob Mulcahy, Trustee of the Somerset County Park Foundation; Margie Margentino, Manager of Lord Stirling Stable; Ray Brown, Director of the Somerset County Park Commission; and Kyle Hartmann, Public Relations Specialist of the Equine Science Center at Rutgers University.

“The farm remained in the Astor name, but soon the family lost interest in the dairy operation,” said Margentino. “The property was then leased out to the Curtis Candy Company who kept beef cattle on the farm until the Astors decided to sell in 1967.” After years of changing possession, the Somerset County Park Commission purchased the farm in December 1967.

After major renovations to the barn, and surrounding area, Lord Stirling Stable opened its doors to the public in 1969. While only starting with 30 horses, the stable is now home to 70 county-owned horses and 10 boarders. But in the 47 years since Lord Stirling’s doors first opened, the changes to the stable have been more than just an increase in the number of horses that now reside there.

This past November, Margentino accepted the 2015 Gold Medal Horse Farm Award on behalf of Lord Stirling Stable. This award marks an accomplishment not for how many horses are

stabled there or money generated, but because of an effort by the staff and management to increase natural resource conservation awareness through implementation of environmentally-friendly equine best management practices.

In other words, Lord Stirling has become an example of how to run an equine facility while at the same time being environmentally responsible.

Lesson programs teaching balanced seat/centered riding, flat and jumping classes from first-time-beginner to advanced levels, beginner western lessons for riders that are at least intermediate level riders in our English program, and private lesson with the instructor are just some of the many different courses offered.

Lord Stirling also has multiple educational programs that not only incorporate riding, but hands-on experiences in the barn: learning how to properly groom a horse, nutrition, taking care of minor medical emergencies,

Location in New Jersey

cleaning and fitting tack, and other general horse management topics.

Working with the community is another aspect of what Lord Stirling does. By partnering with a special use school, the stable provides a unique program to a select group of their students. The school, a private non-profit school established for youth between the ages of 12 and 21, focuses on students that have not been able to be productive in a traditional mainstream educational facility.

The students enrolled at the school have difficulty interacting with others not only academically, but emotionally and behaviorally as well. Students have often been the victims of domestic abuse and other violent acts.

To help the students overcome these challenges, the school uses a “holistic approach that includes differentiated instruction and outcome-based measures.”

Over the last two years, a select group of students have been participating in an Equine Assisted Therapy Program. Once a week, for 10 weeks, the group of eight students participates in an intensive one person/one horse experience under the guidance of a licensed Psychologist trained in Equine Assisted Therapy.

“Through this very specialized program using horses as the ‘tool to achieve the means,’ the non-riding activity helps build self-esteem, self-confidence, patience, compassion, and respect” says Margentino. “The students look forward to coming to the Stable and have greatly benefited from what the horses have taught them. This program has made a productive difference in their lives, education, and the healing process.”

A grant from the Somerset County Park Foundation is enabling this program to



Lord Stirling Stable has more than 14 miles of trails that wind through meadows, forest land, and a portion of the Great Swamp.

continue into 2016.

When thinking about the most impactful moment that Margentino has had at Lord Stirling, she recalls another time where the horse/human bond was able to make a difference in the life of young person.

At an event where we had pony rides for the general public, a father put his young son about five or six years old up on the back of the pony. As the pony started to be led around the ring the child began to laugh and smile.

“The father broke out into tears. I immediately thought he had been stepped on by the pony” said Margentino. “We stopped and I asked him if he was injured. He replied ‘No, I am fine. I am crying because this is the first time I have ever heard my son laugh.’ It turns out his son has Autism and is non-verbal. All it took was the magic of a pony to change that child’s and father’s lives.”



Presentation By Dr. Stull

Lab Notes - The Center

From The Lab: An Evening of Science & Celebration

After a semester of research, each of the recipients of the Equine Science Center's Grants presented on the progress their work.

Presentations included: "The Effects of Rotational Versus Continuous Grazing", "The Effects of Acute Exercise and Exercise Training on the Equine Microbiome", and "The Effects of an Acute Bout of Maximal Exercise on the Unfolded Protein Response".

Dr. Carolyn Stull provided the keynote presentation about making end of life decisions for your horse.

The Center also presented the Gold Medal Horse Farm Award to Lord Stirling Stable. Attendees complimented the center for presenting an educational program on a very difficult topic.



TOP 5 FACTS FROM THE NIGHT

#1

When making a life-ending decision for your horse use the following criteria to evaluate your horse's ability to perform these basic requirements for wellbeing: normal ambulatory movement (M), eating (E), drinking (D), and body weight (W) capabilities.

#2

The microbiome influences the absorption of a wide variety of nutrients and recently published studies suggest that microbiome plays an important role in the health of the animal through its influence on energy homeostasis.



#3

A better understanding of the adaptive response to exercise training at the cellular level will lead to ways to prevent muscle related problems associated with training.

#4

Despite differences between continuous and rotational grazing systems in number of grazing days and amount of hay offered, horse condition was similar between systems. Rotationally grazing resulted in taller pasture heights, but no difference in dry matter available to horses.

#5

Understanding the molecular mechanisms behind the adaptive response to exercise will aid in the development of exercise conditioning and nutritional strategies meant to preserve the health and well-being of the older horse.



The History of the Horse Management Seminar: From 1979 to 2016

The Horse Management Seminar is one of the oldest annual seminar programs at Rutgers University dealing with horses and horse care. Originally started in 1979, this was one of the first day-long seminars created by Karyn Malinowski, in conjunction with the New Jersey Horse Council and the New Jersey Equine Advisory Board, which provided seed money from its educational programs initiative.

Initially the seminar was held off campus at a venue coinciding with the Department of Agriculture's All-Breed Awards Dinner and the beginning of Farmers Week. Malinowski, who was brought on in 1978 as the Rutgers

Cooperative Extension – Equine Extension Specialist, created this series as a way to reach out to the everyday horse person and provide science based information on how to care for their horses.

Now in its 37th year the seminar series is run by Carey Williams. Williams, who started at the university in July 2003 as the Rutgers Cooperative Extension - Equine Extension Specialist, was tasked with taking over this series.

Her first Horse Management Seminar was scheduled for February 2004, giving her just seven months to organize the seminar.

While Malinowski, and Center staff, provided guidance and support, Williams would now be in charge of the largest annual seminar that Rutgers hosts on horses.

For her first year Williams decided to do a variety of topics instead of focusing on a specific “theme”. This allowed a wide range of speakers to be included, and helped her to gauge what the audience was looking for. After a few years, she was able to concentrate these larger topics into specific themes, such as “Pasture Management” and “So you want to breed your horse?”

Themes are changed from year to year depending on attendee feedback, new trends in the field, as well as the needs of the equine community. While sometimes Williams will pick a topic based on a conference that she attended, or make a choice based off of the recommendation of the Equine Science Center, the feedback of those who attend the seminar have become influential in how topics are chosen.

Attendee feedback via questionnaires at the end of the event is also how some of the most successful seminars have been created. To date, “So You Want to Own a Horse” in 2008 was not only the biggest seminar (with around 150 people in attendance), but was also the best-received seminar to date. “I think that the seminar was so successful because of the topic,” said Williams, “ we had a lot of new people come out to this seminar who brought with them a lot of excitement to own a horse and learn about horses.”

Topics for the seminar included “The Cost of Owning a Horse”, “Horse Trailering 101”, and “Horse Nutrition 101”. While a lot of the seminars are geared towards adults, Williams also noticed a jump in attendance from the younger crowd at this seminar, a statistic that has helped her to consider doing this seminar again in the future.



Vendors from the 2015 Horse Management Seminar wait for attendees to visit them during the next break in sessions.

The Planning Stage: What Goes Into Making The Seminar Happen

Once the theme is chosen, Williams begins to piece together all of the moving parts that will make up the event. This includes everything from picking speakers, creating a brochure for advertisement, booking flights, and arranging their hotel and transportation; to requesting company sponsors and vendors, finding door prizes, and organizing registration.

She finds that picking speakers early in this process has many added benefits. Besides being able to save on the cost of flights by booking far in advance, speakers are usually first on her list due to their ability to sway a person’s decision on whether or not they will attend the seminar.

With all of work that goes into the event, it’s something that Williams says she would never be able to accomplish on her own. “From the help of the Equine Science Center using its massive list-serve to help advertise, to the New Jersey Horse Council and their continued partnership, this event is such a success due to equine groups throughout New Jersey coming together to help educate the public.”

Another person that has become an integral part of her team has been Laura Kenny. Kenny,

a recent graduate (Dec. 2015) of the Master's program in Plant Biology and Pathology, has worked with Williams for the last four and a half years as her Program Associate. Becoming the facilitator of booking rooms, planning travel, and publicity for the event, Kenny has taken over coordinating many of the details and behind the scenes arrangements that take place.

Sponsors and vendors also play a huge role in the event. Vendor tables, specifically geared towards riders and horse owners, are set up and stationed throughout the back of the conference room. While this allows for the attendees to find new feeds or supplements for their horses, or to speak with one of the many non-profit groups that attend, Williams says that they play another large role in the event.

"I want to keep costs for registering for the event as low as possible. Through sponsors, and the vendors who pay for their table, we are able to provide attendees with a great seminar while really only charging them for lunch, and some of the seminar materials that they receive" said Williams. "The rest of the cost associated with the event, such as reserving the venue, paying for speakers and travel, that all comes from sponsors and vendors.

Williams has a list of vendors that are asked every year to attend, and sometimes targets the vendors by the theme of the seminar, for example the "Pasture Management" seminar had vendors dealing with forage.

Each of the vendors are asked to provide door prizes for the event which are given out at the end of the seminar. With over 30-40 prizes in total, including a bucket of feed supplements from Nutramax Laboratories, horse health supplies from 3M, and a roadside emergency kit from Farm Family, there are many items to give away!

"Why Do They Do That?": Behavior and Training of Horses

Ever since the introduction of attendee feedback forms, attendees have asked for a seminar about training their horses. In the past, Williams has avoided this topic because of the difficulty in finding appropriate speakers. "Here at Rutgers and the Equine Science Center we really concentrate on topics and information that have science behind it" said Williams. If she was going to have a seminar about training a horse, she wanted to be able to have the science to back up any remarks that would be made, or answers that would be given.

However at the 2015 Equine Science Society Meeting in Florida Kenny attended a workshop on 'equitation science' that she believed might be the answer to William's problem. The workshop that she attended encompassed the ways in which science could be brought into training horses. In fact several presentations were given throughout the workshop specifically on using learning theory to train horses.

The workshops explained that by using the ways in which horses naturally behave, you could create a training model that would work better for training a horse. As of the last few years learning theory has become a more popular topic in equitation science. It's thought that by using the horse's natural behavior, training will be more effective, and show better results.

This year's Horse Management Seminar, "Why Do They Do That?: Behavior and Training of Horses", will feature Angelo Telatin.

A faculty member and trainer at Delaware Valley University, Telatin will talk about using learning theory to train horses as well as how

to use learning theory to solve problems with horses.

Part of Telatin's research has focused on reins and the stress that is put on horses. One of the devices that he uses is a 'Rein Tension Device.' This device has pressure sensors throughout it, and is able to measure the amount of pressure that is being put on the reins when riding.

Also featured, Dr. Carissa Wickens from the University of Florida will talk about the normal and natural behavior of horses along with stereotypic behaviors (understanding cribbing, weaving, and other behaviors). A member of the International Society of Equitation Science (ISES), Wickens' Ph.D. focused on associations between management and stereotypic behaviors in horses.

Other talks include "Psychological Stress and Welfare of Horses" by Dr. Betsy Green from the University of Arizona, and "How Nutrition can Affect Behavior" by Dr. Williams.

The seminar will end with a panel discussion where attendees can ask more specific questions to the speakers. Williams says that this is often "the highlight of the seminar [due to the] great discussions that people have with the experts. People tend to get questions answered that they didn't even think of, saying 'my horse does that too.'"

Williams hopes that participants have a different outlook on training horses by the end of the day, and are able to better understand what is normal horse behavior. Attendees might understand the behavior of their own horse, but not everyone's horse has the same "normal" behavior. The goal of the seminar is for "everyone to have a better appreciation for how horses learn," she continued, "if they come away from the seminar with one useful training tip, I will consider the seminar successful."

Things to Remember:

Registration: January 29th is the last day for the early bird discount. If you are interested in registering, you can go : esc.rutgers.edu/outreach-events. Once there click on the event under the calendar, print and fill out the registration form, attach a check (credit cards are not accepted) for the total amount, and mail to:

Carey A. Williams, Ph.D.
Rutgers, the State University of New Jersey
84 Lipman Dr., 213E Bartlett Hall
New Brunswick, NJ 08901

Sponsors/Vendors: If you are interested in becoming a sponsor or vendor for the seminar, please contact Carey Williams directly at carey.williams@rutgers.edu. The price for a vendor table is \$250 and will include one registration waver for the vendor. If you are interested in additional people tabling at your vendor table, they will have to pay the registration fee.

Cancellation/Refunds: There is no "Snow Date/Weather Date". If there is a cancellation due to weather, refunds will be provided. In the case of a cancellation registrants will be notified via e-mail the day before the event.

2016 ANNUAL HORSE MANAGEMENT SEMINAR

“Why Do They Do That?” Training and Behavior of Horses



Normal/Natural Behavior of Horses

Dr. Carissa Wickens, University of Florida

Using Learning Theory to Train Horses

Angelo Telatin, Delaware Valley University

Psychological Stress and Welfare of Horses

Dr. Betsy Greene, University of Vermont

Problem Solving Using Learning Theory

Angelo Telatin, Delaware Valley University

Stereotypic Behaviors: Understanding Cribbing, Weaving, and Other Behaviors

Dr. Carissa Wickens, University of Florida

How Nutrition Can Affect Behavior

Dr. Carey Williams, Rutgers University

February 14, 2016 - New Brunswick, NJ - 8:00am to 4:00pm

Registration required. Full details and form at esc.rutgers.edu



Equine Science Center
Better Horse Care Through
Research and Education

Contact:

Carey Williams

cwilliams@aesop.rutgers.edu

RUTGERS

New Jersey Agricultural
Experiment Station



NELSON'S CORNER

It's SOMEONE'S ANNIVERSARY!

So I have been doing a little winter reading, you know something to keep me busy while all of the students have been on break, and I found my way into the Equine Science Center's [Library](#) on its website. It's a great place to find all of the past information that the Equine Science Center has put out, take a look at some fun [videos](#), and pictures from past events or listen to a [podcast or radio show](#) that Center staff does!

But as I was searching through all of these articles, fact sheets, and other things, I came across some interesting information. IT'S THE CENTER'S ANNIVERSARY!!!! This year marks 15 years since the Center first opened its doors. How exciting is that?

So I spoke to the staff, and even though I was very happy with myself for finding this information, apparently they already knew. I was a little disappointed at first, but then I found out about all of the cool things that they are planning!

The Equine Science Center will be releasing new promotional items (such as vests and newly designed hats), they will holding special challenges on their [Facebook](#) where you can win prizes, and they are even thinking about some special events (although they kicked me out of the room when they started talking about that... the last thing I heard was something about me being bad at keeping secrets....).

Anyway, after all of these years (and 15 is a lot!) I'm proud to say that the Equine Science Center is my home. Folks at the Center have done some amazing things, and it always seems like they are working on some new project or experiment. But, I want to hear from you! What is your favorite memory, event, publication, or give-a-way of which the Equine Science Center was a part? Write to me, and just maybe I can convince them to let me give out one of those prizes that they were talking about.

Write to me at : LordNelson@NJAES.Rutgers.edu

I hope to hear from you soon!

Your Pal,
Lord Nelson

Contact Us:

Karyn Malinowski

Director

Equine Science Center

Phone : 848-932-9419

E-Mail : malinowski@aesop.rutgers.edu

Kyle Hartmann

Public Relations Specialist

Equine Science Center

Phone : 848-932-9419

E-Mail : hartmann@aesop.rutgers.edu



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