



Horticultural

INSPECTION SOCIETY

Volume 42, Number 1
September 2013

CENTRAL CHAPTER NEWSLETTER

PRESIDENT'S MESSAGE

BOB BUHLER - HIS CENTRAL CHAPTER PRESIDENT
KANSAS DEPARTMENT OF AGRICULTURE

Where has the time gone? It just seems like yesterday that I was inspecting newly arrived nursery stock and now hints of fall are appearing. The Central Chapter of HIS has had a good year. The annual conference in Manhattan, Kansas was informative and well attended. Susan Ehlenbeck received the Carl Carlson award. She is certainly deserving of the award for her inspection work in Missouri, and her involvement in HIS. More recently she has been involved in the development and implementation SANC and to organize HIS chapters into a more cohesive group.

At the HIS Central conference in Manhattan, KS there was a lot of good discussion on Emerald Ash Borer (EAB) which was timely as Kansas had just reported their first find. There were also speakers from Kansas State University and the USDA that enlightened us on entomology, plant pathology and audit-based certification. The group visited the Kansas State, Insect Zoo which was a big hit.

Dale Anderson also deserves some thanks. He has been the lone cowboy in corralling the officers of all the HIS chapters into national conference calls. I personally have learned a lot of new things on how the other chapters operate by attending these conference calls. Dale has recently announced that he will be stepping down from this position. Thank you for all of your organizing efforts over the past few years.



The multi-state inspector training was held a few weeks ago in Ottawa, KS. We had inspectors attending from North Dakota, South Dakota, Wisconsin, Nebraska, Missouri, Kansas and California.

Continued on page 9

Inspectors participating in mock Incident Command Exercise during the multi-state training held in Ottawa, KS, August 19th through the 21st include from left to right: Paul Anderson - South Dakota, Beth Slate - California, Kathleen Pratt - Nebraska, Libby Smith - Nebraska, Sue Kohles - Nebraska, Bob Buhler - Kansas, Jeremy Maples - Kansas, Liz Meils - Wisconsin, Christel Zillmer - Wisconsin, Dr. Raymond Cloyd - Kansas, Susan Ehlenbeck - Missouri, Mandy Franklin - Missouri, Charles Elhard - North Dakota.

Missing from picture, Tom Sanders - Kansas, Ken Rauscher - National Plant Board, Dr. Megan Kennelly - Kansas, Catherine Smith - Missouri

Making Professionalism a Part of Every Effort

2012 CENTRAL STATES CHAPTER HIS MEETING HIGHLIGHTS

MAHATTAN, KANSAS

Monday October 22, 2012

Arrival - evening gathering at Clarion Hotel,
Manhattan, Kansas

Tuesday-October 23, 2012

Welcome to Kansas - Jeff Vogel

Emerald Ash Borer Discussion - Kansas and
Missouri Department of Agriculture.

Plant Disease in Nursery Stock - Dr. Megan
Kennelly - Kansas State University

Susceptibilities of Trees to Worldwide Pests - Dr.
John Ball - South Dakota State University

Interdiction of Foreign Pests and Illegal
Commodities - Jeff Hash SITC

Plant Diagnostic Tour Kansas State Campus - Dr.
Megan Kennelly and Holly Davis

State Reports - Each member state presents a
summary of plant pest regulatory highlights.

Wednesday-October 24, 2012

Techniques in Nursery Inspection - Bill Mc Adams,
Mc Adams Consulting

Tour Nature Conservancy's Konza Prairie

Why are we still planting Ash? - Jason Griffen
Kansas State University

National Plant Board - Systems Approach to
Nursery Inspection (SANC) - How to Make SANC
Work - Ken Raucher

Understanding Audit Training - Troy Fine, USDA,
Animal Plant Health Inspection Service, (APHIS),
Plant Protection and Quarantine (PPQ)

Thursday October 25, 2012

Business Meeting of the Central Chapter HIS at
Conference Center.

Adjourn.



Some of the residents of the
Nature Conservancy's Konza Prairie



Display at Kansas State Insect Zoo

Membership Challenge

As new staff is hired, staffing changes occur or budget shortfalls or retirements happen, many potential and past members become uninvolved and uninformed. This is a challenge to HIS members in each state to make sure all staff committed to "Making Professionalism a Part of Every Effort" update their contact information and pay their HIS-Central membership dues. Please invest in your profession and encourage your colleagues to do the same.

PROFESSOR CHARLES EDWIN BESSEY *More Than Just A Botanist*

By: Ryan J. Krull

One of Nebraska's most influential, yet least recognized men is Charles Edwin Bessey. He was lured to Nebraska by the Board of Regents in 1884, from Iowa State. The Regents knew they wanted him to build the new Department of Botany. Bessey initially declined after realizing he would have to start from the scratch as he once did at Iowa. Then the Regents offered a larger

position, the Head of the Botany Department and the Dean of the Industrial College, which included the Department of Agriculture. Bessey would later that year accept the offer, and move to Lincoln.

He was born May 21, 1845 in Milton, Ohio. He grew up on the farm, and was primarily taught by his father, Adnah, who had Classical Academic Training. His father being a fine Latin, Greek and Mathematic scholar gave young Bessey a great foundation for his education. His first educational desires led him to teaching; by age 17 Bessey had his Teaching Certificate.

Prior to college he entered an academy in Seville, Ohio to prepare for a civil engineering program at Michigan Agriculture College or "Michigan State" where he would later attend in 1866. But before he could attend his father died in 1863, at which time he moved home and taught. While studying at Michigan State he realized his enthusiasm for botany. After the encouragement of his professor Alfred Nelson Prentiss, Bessey eventually changed majors. He would graduate with a B.S. in 1869. His first job was the Greenhouse manager at Michigan State. In 1870 He was the first to become an instructor of Botany and Horticulture at Iowa State College of Agriculture in Ames. He would later receive his M.S. from Michigan State in 1872, and then advanced to professor at Iowa State.

Bessey was chiefly interested in the aspects of botany especially those related to applied agriculture. After he met Asa Gray, who was the leading botanist at the time, Gray invited Bessey, in the winter of 1872-73, to study at Harvard for three months, learning morphology, systematics, and the taxonomy of plants. The leading research at the time was cataloging all the flora of the United States. Bessey would become a leader in identifying, classifying, and cataloging the flora of the new land in the West.

He was beginning to create a name for himself, and in 1875 was asked to be a guest lecturer, by the President of Berkley College. Bessey then gave a lecture series on botany. In the following winter, Bessey would again spend some time with Asa Gray at Harvard.

At the request and recommendation of Gray and a publisher, Bessey began to write books on botany for high school and colleges. The first of which in 1878 was Botany for High Schools and Colleges, and was edited by Bessey several times. Then followed 'The Essentials of Botany' a brief course on botany, which went through several editions and was a widely used text. He would produce one more textbook The Essentials of College Botany written in 1914, with the aid of Dr. Ernest Bessey, Charles's son. These texts would become the most widely used books in high school and college courses.

Charles Bessey was a man of many outstanding attributes that qualify him as a great leader, teacher, father, researcher and a great forward thinker. He was well known as a botanist,

Continued on page 4



being proclaimed as the father of modern botany. After the death of his mentor, Asa Gray, Bessey was proclaimed by many as the leading botanist in the United States at that time. His research at Iowa and Nebraska not only covered the young field of botany, it covered all fields that are based on plants such as Plant Pathology, Horticulture, Entomology, Forestry and especially Agriculture. The field of botany was like a needle and thread that weaved all these fields together.

Bessey was a great researcher, writing about flora within Nebraska and other prairie states. Much of the time was given to the survey of the structures and evolution of all the main groups of the plant world, which would culminate to eventually produce “The Phylogenetic Taxonomy of Flowering Plants” (1915).

A large proponent in the establishment of Agriculture Research Stations across the US. He was asked to construct job descriptions for these experiment stations. Bessey could foresee questions and had the desire to find the answers. In his travels looking for plants he wondered why there were only a few trees in isolated areas in the prairie states.

His relationship with research extended into many fields. Fields such as Entomology writing in Iowa “Iowa Orthoptera” (1876), and “On the Distribution of The Seventeen Year Cicada” (1878). Other fields such as Plant Pathology in “The Diseases of Plants” (1882), and “The abundance of Ash Rust” (1885). His fields of research spread across many other areas.

His lifelong research was the product of several leading papers evaluating the foundations of the superstructure of American Botany. His monumental discoveries and work were the product of first “The Phylogeny and Taxonomy of the Angiosperms”, “Evolution and Classification”, “The Phyletic Idea” and finally the work that encompassed a quarter of a century of work “The Phylogenetic Taxonomy of Flowering Plants”. Bessey’s work rethought the German bible of botany “Das Pflanzenfamilien” and applied different theories to the work and was considered revolutionary. The serious study of higher plant phylogeny did not come for several years. In the 1950’s and 1960’s scientists reentered the research. Men such as Cronquist, Thorne, and Takhtajan entered this field and differed from Bessey in details but was the he was the center of the rethinking the methods of taxonomy. Cronquist’s book gives due credit to Bessey’s work, stating his work would “profoundly influenced subsequent taxonomic thought”.

Bessey has been said, by many influential people, to be the greatest professor at the University of Nebraska in his time. Pool states beautifully what the culmination of many biographies, and interviews have testified.

But after all has been said about all of the other features of this great man’s life we still must conclude that the most powerful and far-reaching effects of his captivating magnetism were recorded in the classroom, in the laboratory, in the college and in the university as a teacher and guide for the young. Professor Bessey utilized this potential to the limit, for he was one of the greatest teachers that the world has known. His powerful presentation of subject matter in the classroom was magnified by a personality, which, because of its quaint paternal cordiality, won the admiration of thousands of students. (Pool)

Bessey would be inspired by his father to earn his teaching certificate at the early age of 17. He would teach many high school classes before he stepped foot into a college classroom. The art of teaching was what Bessey knew best. “His methods in the classes were full of boyish enthusiasm, he was so companionable, students would be infected with the matter with which he dealt. Many parents told their children to take Professor Bessey’s class, not because they needed it, because it is so great to have a professor such a Bessey,

As Dean, Bessey was instrumental in building up the University of Nebraska School of Agriculture and in developing the Department of Botany. He also convinced the state legislature to provide agriculture courses in Nebraska high schools” (Pool)

Bessey took the classroom into the modern era by being the first undergraduate professor to bring botany a lab and a microscope. Bessey wrote several well-known and well-used books about botany. Bessey built Dept. of Botany at Nebraska, starting the program from scratch when he arrived in 1884. He was the head of the program and Dean of the Industrial College, which included Agriculture. His office was one of the smallest rooms in the building. His door always had two signs posted “busy” and under that “come in” which expressed his importance for the students. If ever a student would come back to Lincoln it was rare that he did not stop in to chat with Bessey. One of Bessey’s favorite things to do was to look over the list of thousands of students and look at all the positions that they have held all over the US and Globe. If a student should be a product of Bessey they could get a great letter of recommendation, and would almost always get the job. Bessey made a careful count of his students once and figured in his forty-five years as a college professor he had taught around 4,000 students. A few of Bessey’s more prominent students were, Roscoe Pound, Frederick Clements, Ernst Bessey, Raymond Pool, Th. Kiesselbach, F. D. Keim, and J.H... Gooding.

A quote of Professor Bessey to his young pupils was including botanical and fatherly advice “Keep your lives as meristem tissue, so that you may grow, never let your attitudes become sclerenchyma tissue, hard and unchangeable”. (Holck)

Bessey amongst many other things was a great man of organizations, and political affiliation. He was a member in countless organizations through his years, many he would at some point become president, vice president, or a guiding light within these organizations. He created many organizations himself, such as the State Park and Forest Association with the purpose of awakening interest in home adornment, city improvement, and planting of parks and forests (pool). Another very well known and famous organization that Bessey had much influence in is the “Sem. Bot.” Seminar series that were essentially created by his students to give researchers a chance to present their research findings to a group of their peers. The seminar would draw many famous people to share leading research to young, fresh scientists. Many very famous and influential scientists were also members of this honorary and exclusive organization. Bessey and Gov. Furnas also organized the first series of Farmers Institution, this was created to educate farmers on better agricultural practices and to increase yields. He was a large proponent in the campaign to remove the Calveras groves of Sequoia from private ownership and destruction, in the Outdoor Art League of California. One of Bessey’s longest and most strongly affiliated organization was his involvement with The Wild Flower Preservation Society of America, which many years were president of the state chapter. Through this Chapter he stayed very active in conserving the native flora of Nebraska, and the US. The most prestigious and honorable of all achievement in any organization was when Bessey was elected President of The American Association for the Advancement of Science in July of 1909, in Minneapolis. On the arrival home this event three years later, when he resigned as the president, he had a grand welcoming committee congratulating him on his achievements and thanking him for 29 years of service to the University of Nebraska.

Bessey’s political affiliation fit the mold of a Liberal-Republican-Progressive, opposing monopolies and corporations as they are only concerned with short-term gain and cared little about the future. Bessey strongly supported national leadership in Forestry and Conservation. Bessey believed at that time, that neither the scientific community, nor the local, state or even federal government was ready to successfully manage forests. He believed in conserving them now so that we can save them until we fully understand them. Bessey did not believe in pure conservation, rather a more utilitarian view similar to Gifford Pinchot, to use them without destroying them. Bessey had many political affiliations with

Continued on page 6

several prominent people including great men such as Gifford Pinchot, Teddy Roosevelt, Bernard Fernow, Governor Furnas, and William Jennings Bryan.

Bessey had great foresight, and could see problems arising before others, such as the deforestation of trees to build homes for the rapidly growing Nation. Bessey promoted from the early 1880's to plant trees in the Sand Hills to aid in the expanding timber industry. He would lobby the local, state and successfully the federal government to put aside many acres in conservation. Bessey successfully lobbied first Bernard Fernow the head of the Division of Forestry, and later Gifford Pinchot and Teddy Roosevelt for the creation of now Halsey National Forest. Bessey lobbied for the conservation of many other parts of Nebraska that had any residual natural forest left including Ft. Calhoun, Arbor Lodge, Thurston County and parts of the Niobrara.

Bessey received his masters from his Alma Mater, Michigan Agriculture College, in 1872, then received his honorary PhD in Philosophy from Ames, in 1879, due to his work and contribution to botany and related fields. Bessey was a great advisor to students and later became a great leader of the University of Nebraska as a Dean and Chancellor of the College. He was interim Chancellor in 1888-1891, and became the Dean of Deans in 1909. Under his lead the Department of Agriculture, Botany and the Industrial College enrollment each year increased.

Bessey was a man of beliefs, he believed fully in God, and being a member of a Church. Whenever he would move he always found a local Church to attend. In a few situations he even took the pulpit while a minister was away. In Lincoln he helped in the building of the First Congregational Church, where he was a member for almost 30 years, and often even taught Sunday school. In the services of his death, a colleague stated, "It was useless for him to dwell upon the character of the departed, that his life was the best testimony of his belief in God". "Bessey would rather live the life of God, rather than boast his religion". (Daily Nebraskan, 1915)

As the character builds, the trail of Charles Bessey leads to a great man. If you took away all the accomplishments, books, achievements, and honors you would still see a great man of ideals, strengths and character. When you add back all the accomplishments, there is nothing that could separate him from being a great leader, teacher, father, researcher and great forward thinker of his time. The culmination of biographies, correspondence, interviews and achievements frame the man that led the University of Nebraska to national recognition for his Botany Department. Has lead the State of Nebraska to conserve over 80,000 acres of the only hand planted National Forest in the Nation! Bessey, through his professorship, lead hundreds of bright, young scientists to lead the nation in their fields. Bessey enchanted many Presidents, Governors, scientists, local organizations and students into loving the outdoors. Bessey also wrote several books on botany for college and high schools, which were widely used. He has been the guiding light into many organizations, including becoming president of the most prestigious organization that an educator could be part of, The American Association for the Advancement of Science.

Bessey had a strong ethical and moral foundation for life. Two statements from his parents frame his character well.

When Bessey died there was a huge void at the University, one that has never been filled due to his enthusiasm, and hard work. He alone was the equivalent a single department at the University. He stuck to these words till his last days. As a boy his father never thought of life as "a money getting race", upon which Bessey died a monetarily very poor man. Leaving his family with little to live on, friends and

associates of Bessey created a memorial fund to support Bessey's wife Lucy. Many remember Bessey as an old man that still had a very young mind. Only three days before his death, he was lobbying the University and the State to maintain the Industrial College and the University as one Institution. Senators Beal and Taylor wanted to separate the Agriculture College, Research stations, and the Agriculture Farms from the control of the regents. They wanted the control of these departments out of the University and under the control of the Legislature. This would be defeated, but not before political slander pointed at the old gray men of the Industrial College, presumably Professor Bessey. This would rile up many of Professor Bessey's past students, and associates. As Roscoe Pound, then Dean of the College of Law at Harvard, stated in a letter to Professor Erwin Barbour "I do not wonder that you have your fighting clothes on". Bessey would unfortunately not see the day when the idea was defeated. He passed on February 25, 1915 in Lincoln, Nebraska.

Yes, he is one, but to have met him was to honor him; to have been taught by him was a priceless privilege; to have been intimately associated with him was a benediction; to have walked with him in the fields and woods and to have received from him a glorious view of the realm of which he was master was to have been led very close to the great throbbing heart whose pulsations will never cease in the breasts of those who sat at his feet until they too shall have passed into the other room. (Pool)

Sources Cited

Avery, S. "Friends of Dean Bessey Join in Appreciations." Daily Nebraskan 1 Mar 1915

Bessey, C.E. "Botany Instead of Engineering" (date or source unknown)

Holck, H.G. "Charles Edwin Bessey (1845-1915), Inspired Botanist and Horticulturist, Outstanding Agricultural Developer, Conservationist and Educator."

Holck, H.G.O. "History and Philosophy of Science: Niche for Past Nebraska Scientists of Note Charles Edwin Bessey (1845-1915)" Transactions of the Nebraska Academy of Sciences

Overfield, R.A. 1993. Science with Practice: Charles E. Bessey: The impact of the "new"

Botany on American agriculture. Technology and Culture 16:162-181,

Overfield, R.A. "Trees for the Great Plains; Charles E. Bessey and Forestry" Journal of Forest History 23.1 1979

Pammel, L.H. 1928. Prominent Men I Have Met: Dr. Charles Edwin Bessey. Ames, IA.20.

Pool, R. J. "A Brief Sketch of the Life and Work of Charles Edwin Bessey." American Journal of Botany 2.10 (1915)

Pool, R. J. "Dean Charles E. Bessey" Reprinted from Semi-Centennial Anniversary Book; The University of Nebraska 1869-1919 .1919

"Last Services for Dean Bessey in Memorial Hall." Daily Nebraskan 1 Mar. 1915

THE CENTRAL CHAPTER HIS 43TH ANNIVERSARY MEETING AND
GATHERING WILL BE HELD AT THE MORTON ARBORETUM LISLE, IL.
OCTOBER 21ST - 25TH 2013

MARK YOUR CALENDARS, PESTER YOUR SUPERVISORS AND INFORM YOUR PEERS!

Planned Presentations include:

Canker Diseases of Trees – Stephanie Porter, U of I Plant Diagnostic Specialist

Canker diseases are a serious and costly problem in nurseries. Information will be provided on identification and prevention of cankers on trees.

Forest Pest Surveys - Illinois CAPS Program - Kelly Estes, IL Natural History Survey

Overview of the surveys conducted for exotic pest/disease detection such as Thousand Cankers Disease and others that have eluded first-line inspections at ports of entry.

Scale pests & their Control – Bill McAdams, McAdams Consulting

Scale insects are small sap sucking insects that can be difficult to detect and identify. Techniques in detection, identification and control will be provided.

SANC Program Updates - Ken Rauscher

SANC is a program and concept to encourage best-management strategies in the nursery concerning pest management. The program requires the nursery and nursery inspectors to work together to insure pest freedom and to foster uniformity of pest inspection programs across the nation.

The Morton Arboretum Research Projects – Stephanie Adams, The Morton Arboretum Current Arboretum research projects applicable to the green industry.

Host Plant Resistance and EAB: A look at the Promising Asian Ash. Dr. Frederic Miller

Emerald Ash Borer has caused the deaths of millions of native ash trees in the Midwest. Information will be provided on Asian ash species that may have tolerance to EAB and could be planted in the Central U.S.

Diseases & Viruses of the Greenhouse – Dr. Colleen Warfield, Ball Horticultural

Plant disease and especially viruses are a serious issue in the production of greenhouse plants. Information will be provided on identification and management of greenhouse plant diseases.

Chicagoland Grows Program - Dr. James Ault

Innovative plant introduction program of new plant cultivars that are well-adapted to the growing conditions of the Upper Midwest. While regional in focus, the program's plants can be grown successfully in all zone-appropriate regions of North America.

Compliance Agreement Programs - Mark Cinnamon, IL Dept. of Agriculture

Information will be provided in developing an effective compliance agreement between a nursery and the state plant health agency concerning the management of a plant pest.

Diagnostic inspection of plant material - The Morton Arboretum grounds.

Inspectors will receive in the field training in plant pest identification and management.

Site details:

The Morton Arboretum's living collections represent one of the most comprehensive collections of woody plants in North America. Throughout the Arboretum's history, it has acquired plants from 40 countries in the northern temperate zone of the world. The collections today include over 222,000 live plants representing nearly 4,300 taxa. Specimens are arranged according to five groups: taxonomic collections (e.g. elms and oaks), geographic collections (e.g. trees and shrubs from China), special habitats (e.g. Plants of Acid Soils), horticultural collections, and collections of rare and endangered plants.

The collections are displayed in beautiful landscape settings and are designed for both enjoyment and educational purposes. Plants are selected for their ability to perform well in Northern Illinois' challenging climate of hot summers and freezing cold winters, as well as for their adaptation to our soils. The collections represent a diversity of plants from around the world and here in the U.S. Additionally, 90 different kinds of plants on the grounds are considered threatened or endangered on state, federal, or world lists.

The HIS fall conference is designed to bring topics that are relevant to the work of State nursery inspectors. Join the conference; learn from the knowledgeable presenters and tap into the wisdom and experience of HIS inspectors.

Questions about the program or site? Contact:

Nanette Kalscheur
 HIS Vice President
 IL Dept. of Agriculture
 2280 Bethany Rd.
 DeKalb, IL 60115
 815-787-5476
nanette.kalscheur@illinois.gov

It was great to have someone from California attend. Her insights on how things are done out west were eye opening. The training included Ken Rauscher (National Plant Board) having a real time SANC interview with the Nursery Grower. Kansas State University professors gave lectures on scale insects and plant diseases. In the afternoon a mock Incident Command Exercise was held for the inspectors at the "strike team" level. Everyone seemed to enjoy surveying and eradicating "Egg Scale". The adults were Easter eggs and the crawlers were "Good & Plenty". Various injections of CNN reporter interviews and fainting spells were inserted into the exercise to make things more realistic. We finished with a classic nursery walk through, where the inspectors teach the inspectors.

The next Central Chapter Annual Conference is coming up in October in Lisle, Illinois. Nanette Kalscheur has worked hard over the past year to put this conference together. It looks like it will be a great conference. The registration forms and agendas were sent out a few weeks ago. Please talk to your supervisors to let you attend.

In conclusion it has been a pleasure to be a HIS officer over the years. As I let go of the reigns it is time for members who have not served to take up the challenge and be involved. I would like to thank the following people for making this organization work: Nannette Kalscheur - Vice President, John Bock-Secretary, Sarah Phipps & Susan Ehlenbeck - Treasurer, Dale Anderson-HIS Board, Susan Ehlenbeck - SANC Committee, Todd Voss - HIS Manual Editor & website, Steve Shimek-Newsletter Editor, and John Bock & Todd Voss - List-serve.

IOWA FINDS EMERALD ASH BORER IN SECOND AND THIRD COUNTIES

TODD VOSS - IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP

Iowa has added two more counties that have been confirmed positive for emerald ash borer (EAB), for a total of three counties. EAB was first found on Henderson Island in the Mississippi River in Allamakee County in 2010 near the Minnesota and Wisconsin borders.

EAB has been positively identified in residential trees in the city of Burlington in Des Moines County, and also in the city of Fairfield in Jefferson County, making these the second and third locations; respectively, where the invasive beetle has been found.

Burlington has about 700 ash trees in the public right-of-way and an estimated 2,000 residential trees. It is unknown how many public and residential ash trees are located in Fairfield. According to the USDA Forest Service, Iowa has an estimated 52 million rural ash trees and approximately 3.1 million more ash trees in urban areas.

With these new EAB finds in counties with close proximity to one another, there is likely to be a multi-state quarantine issued by the Iowa Department of Agriculture and Land Stewardship (IDALS), along with the United States Department of Agriculture (USDA), in southeast Iowa in the near future.