The 56th annual Texas A&M Beef Cattle Short Course, sponsored by the Texas AgriLife Extension Service, is scheduled Aug. 2–4 at Texas A&M University in College Station.

A wet spring and a historic rebound in cattle prices have spurred optimism among ranchers across Texas. However, a fairly dry April has some beef producers concerned that they are heading into another drought, said Dr. Jason Cleere, AgriLife Extension beef cattle specialist and conference coordinator.

“The long-term cattle market outlook and preparing for the next drought are just two of the many topics that will be discussed in the 21 different cattleman’s college sessions at the short course,” Cleere said.

In addition to the classroom instruction Aug. 2–3, participants can attend one of the popular demonstrations on the morning of Aug. 4.

“These provide an opportunity for ranchers to see beef cattle production practices put to use.”

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“The goal of the short course each year is to provide the most cutting-edge information that is needed by beef cattle producers, and this year is no exception.”

Participants can receive a pesticide applicator’s license during the short course as well as numerous pesticide continuing education units if already licensed, Cleere added.

An industry trade show held during the event will feature more than 110 agricultural businesses and service exhibits.

Registration is $140 per person and includes educational materials, a copy of the 600-page Beef Cattle Short Course proceedings, trade show admittance, admission to the prime rib dinner, meals, and daily refreshments.

Registration information and a tentative schedule will be mailed to previous participants in June. Registration information and a final schedule can be found on the short course website at http://beef.tamu.edu.

Producers can register online at http://beef.tamu.edu or contact Dr. Cleere’s office at (979) 845-6931.

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**BEEF AND DAIRY PRACTICE**

**New Johne’s Disease Brochure Available**

A 16-page brochure on Johne’s disease has been released and is free to beef and dairy producers and veterinarians.

This new brochure describes how animals become infected with the organism that causes Johne’s disease; it details measures that producers can take to help prevent and control Johne’s disease; and it explains testing strategies.

The science-based brochure was underwritten by the USDA Animal and Plant Health Inspection Service’s (APHIS) Veterinary Services and was produced by the National Johne’s Education Initiative, which is overseen by the National Institute for Animal Agriculture.

Johne’s disease is estimated to be present in 68 percent of U.S. dairy operations and 8 percent of beef cattle herds.

A National Animal Health Monitoring System study found that producers lose an average of $40 per cow in herds with low Johne’s disease clinical cull rate and $227 per cow in herds with a high Johne’s disease clinical cull rate. This loss is due to reduced milk production, early culling and poor body condition at culling. Beef cows that are clinically affected with Johne’s disease produce less milk, so their calves are lighter at weaning, and infected cows can be slower to breed back.

Johne’s disease experts agree that the economic losses can be significantly reduced when producers are educated about testing and control measures.

This Johne’s disease brochure is available at www.johnesdisease.org or by calling National Institute for Animal Agriculture at (719) 538-8843.


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**GENERAL PRACTICE**

**Publication B-182, Know Your Grasses, Available**

Grasses are one of Texas’s most valuable natural resources. This publication (November 10, 2008, 100 pages, 100 illustrations, 1 map) will introduce you to the amazing variety of native and introduced grasses in Texas.

The plants are arranged alphabetically by common name, with scientific names given for clarity and reference. Each grass is beautifully illustrated and carefully described, with information about the areas of the state in which it can be found.

Costs are $14.95 for individual copies and $10.95 each for orders of 12 or more. Go to https://agrilifebookstore.org to order.

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**USDA Veterinary Medicine Loan Repayment Program Currently Accepting Applications**

Applications are being accepted for the USDA’s Veterinary Medicine Loan Repayment Program (VMLRP). Authorized by the National Veterinary Medical Services Act, the program helps qualified veterinarians offset a significant portion of the debt they incurred while pursuing their veterinary medicine degrees in return for their service in designated high-priority veterinary shortage situations for an allotted period.

If a qualified veterinarian commits to at least 3 years of providing veterinary services in a designated veterinary shortage area, the USDA National Institute of Food and Agriculture may repay up to $25,000 of his or her student loan debt per year. Loan repayment benefits are limited to payments of the principal and interest on government and commercial loans received for the attendance at an accredited college of veterinary medicine resulting in a degree of Doctor of Veterinary Medicine or equivalent.

All eligible veterinarians—including women, individuals from underrepresented groups, and persons with disabilities—are encouraged to apply for the loan repayment program. For eligibility criteria, see www.nifa.usda.gov/nea/animals/in_focus/an_health_if_vmlrp_education_eligibility.html.
Eight multi-county areas in Texas have been designated as VMLRP shortage situations. They are listed at http://www.nifa.usda.gov/nea/animals/in_focus/vmlrp/vmlrp_shortage_situation_texas.html.

Applications may be made from April 30 to June 30, 2010. A person may submit only one application per cycle.

For more information, contact VMLRP via email at vmlrp@nifa.usda.gov or (202) 401-4952. Although the Texas Animal Health Commission does not administer this program, comments or questions related to the shortage areas can be directed to comments@tahc.state.tx.us.

From the May 4, 2010, news release, “USDA Veterinary Medicine Loan Repayment Program Currently Accepting Applications,” TAHC, Dee Ellis, DVM, MPA, Executive Director, P.O. Box 12966, Austin, Texas 78711, (800) 550-8242, http://www.tahc.state.tx.us. For more information, contact the Public Information office at (800) 550-8242, extension 710 or at bonnie.ramirez@tahc.state.tx.us.

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WILDLIFE AND EXOTIC PRACTICE

National Feral Swine Mapping System

In 1982, the Southeastern Cooperative Wildlife Disease Study (SCWDS) produced a series of maps depicting the nationwide distribution and density of several species of wild or feral cloven-hoofed animals that are susceptible to foot and mouth disease. To meet the continuous demand for information on the dramatically expanding range of feral swine, SCWDS updated this map in 1988, 2004, 2008, 2009 and 2010.

In 1982, 17 states reported feral swine; in 2004, the number of states reporting feral swine rose to 28; and currently, 36 states report populations of feral swine. These maps show established populations, not incidental or occasional sightings. Established populations are those that have been present for at least 2 years and those that show evidence of, or a demonstrated potential for, reproduction.

To collect and display current distribution data on feral swine in the United States, SCWDS developed the National Feral Swine Mapping System (NFSMS) in 2008 in cooperation with USDA-APHIS-Veterinary Services (see SCWDS Briefs Vol. 24, No.1). This interactive data collection system can be accessed at http://www.feralswinemap.org/. The home page is available to the public, but a password-available-only area allows state and federal agency personnel to view the interactive data.

Operation of the NFSMS is a collaborative effort between SCWDS, the Information Technology Department of Georgia’s (UGA) College of Veterinary Medicine, and the Center for Remote Sensing and Mapping Science in UGA Department of Geography. Since the system went online in 2008, more than 330 individual additions have been made to the map through NFSMS, and several states have provided completely new maps with many changes.

As with previous maps, distribution data is provided by personnel with state and territorial natural resources agencies and USDA-APHIS-Wildlife Services. Agency personnel can submit this information online at any time by locating the selected areas on the website map and drawing additions to the feral swine distribution directly onto the map. Populations and sightings are distinguished as shaded areas or single points. Areas where feral swine have been eliminated can be deleted from the map in the same manner. The data are carefully evaluated by SCWDS, and the national map is updated monthly.

The SCWDS can also furnish state or regional maps on request. Although it was developed primar-
ily for evaluating the local risk posed by feral swine spreading pseudorabies virus and swine brucellosis, the NFSMS provides access to up-to-date data on the distribution of feral swine in the United States. These data are important to state and federal wildlife resources managers, agricultural agencies, and public health agencies throughout the nation.


**Brucella Suis in North America**

Each of the six characterized species within the *Brucella* genus has its own principal host species; however, all can cause disease in humans and a variety of wild and domestic mammals.

*Brucella suis* is an important pathogen of wild and domestic pigs, with multiple biovars that affect a number of other species. Biovars 1, 2, and 3 can infect swine; biovar 4 is maintained in reindeer and caribou; biovar 2 also occurs in European hares; and biovar 5 is found in small rodents. All subtypes of *B. suis* have zoonotic potential, but biovars 1, 3, and 4 in particular pose significant threats to human health.

Brucellosis in humans can be a serious, debilitating, and often chronic disease with nonspecific signs. Symptoms can include fever, headache, gastrointestinal upset, anorexia, and arthritis.

Humans usually become infected by direct contact with tissues, blood, urine, fetuses, and placentas of infected animals and by ingestion of raw milk or dairy products. Like most *Brucella* species, *B. suis* is found in high numbers in tissues associated with an abortion or stillbirth from an infected animal.

Transmission in swine primarily is through coitus and ingestion of contaminated or aborted material. Among reindeer and caribou, transmission occurs mainly through contact with infective uterine discharges after abortion.

Historically, human cases of *B. suis* occurred most commonly in swine slaughterhouse workers. However, human infections from domestic swine disappeared in the United States since the National Cattle Brucellosis Eradication Program was expanded in 1972 to include commercial swine herds and *B. suis* was eradicated from domestic pigs.

Currently, human *B. suis* infections in the United States are predominately associated with exposure to feral swine. Feral swine are a significant reservoir and pose a threat to domestic swine and human health. In 2009, the U.S. Centers for Disease Control and Prevention published a report detailing *B. suis* infections in three men who had hunted and handled feral swine in Florida (SCWDS Briefs Vol. 25, No. 2).

Serologic investigations of infected feral swine herds in the Southeast have revealed *B. suis* antibody prevalence of 5 to 44 percent. In 2007, 80 pigs were euthanatized and necropsied from a known enzootically infected herd in South Carolina that had been used for brucellosis vaccine research. *Brucella suis* biovar 1 was isolated from 69 percent of the animals, and *B. abortus* (two vaccine strains and one field strain) was isolated from 35 percent. However, only 49 percent of the animals were positive for *Brucella* antibodies, suggesting that the sensitivity of serologic tests may not be as high as previously thought.

In a recent SCWDS study, *B. suis* was found in feral swine herds in South Carolina but not in North Carolina (SCWDS Briefs Vol. 25, No. 4). This was attributed to the possibility that feral swine in the study area in North Carolina became established after brucellosis had been eradicated from domestic swine and have remained free of infection this far.

The distribution of feral swine in the United States has been expanding, primarily due to human-assisted movements, and *B. suis* is expected to spread to uninfected feral herds.

In the Arctic region, the major reservoir is rangiferine cervids rather than swine. *Brucella suis* biovar 4 has long been enzootic in many caribou herds throughout Canada and Alaska. Antibodies also have been found in moose, wolves, grizzly bears, arctic foxes, sled dogs, and humans.

A survey of caribou, grizzly bears, and wolves in Alaska from 1975 to 1988 showed that antibody prevalence for *Brucella* ranged from 0 to 9 percent for caribou, 0 to 25 percent for wolves, and 0 to 24 percent for bears. For all three species, prevalence was much higher in the northern part of the state.

Brucellosis has been found on multiple occasions in sled dogs in Alaska that were fed raw caribou meat as part of their diet. Based on published reports, it can be concluded that brucellosis is present in much of the rangiferine cervid population of Alaska and Canada and is commonly transmitted to predators.

Most human cases of *B. suis* biovar 4 are acquired by ingesting raw caribou meat or bone marrow, a common practice among indigenous people of the Arctic region. Brucellosis in humans in the Arctic has been documented since the early 19th century but was most commonly caused by *B. abortus* in unpasteurized cow’s milk.

In 1959, the first cases of *B. suis* were described in residents in the villages of Wainwright and Barrow, Alaska, and other cases of *B. suis*-related illness have been described in Alaska since then. Between 1982 and 1990, 12 human brucellosis cases were attributed to *B. suis* bio-type 4, and all involved clinically ill Alaskans whose diet included cari-
Rottweiler Study Suggests Ovaries May be Linked to Increased Longevity

A study on the biology of aging in dogs found that Rottweilers that were spayed after 6 years old (119 animals) were 4.6 times more likely to reach 13 years of age versus Rottweilers spayed at a younger age (186 animals). The average lifespan of Rottweilers in general is 9.4 years. This Rottweiler study mirrors a 2009 Nurses’ Health study that looked at 29,000 women who underwent hysterectomies for benign uterine disease. The findings showed that the benefits of ovary removal as protection against ovarian, uterine, and breast cancer were outweighed by increased mortality rate from other causes. The result was that longevity was shortened in women whose ovaries were removed before age 50, compared to those who kept their ovaries for at least 50 years.

These data offer a different viewpoint on routine canine ovariohysterectomy and suggests that removing the ovaries has possible unforeseen consequences such as shortened longevity. However, the authors noted that the population of Rottweilers in their study had responsible owners and were not stray or mongrel dogs. They also stated that biology is not an all-or-nothing situation and not all Rottweilers or all women will benefit from keeping their ovaries.


USDA Fully Licenses DNA Vaccine for Treatment of Melanoma in Dogs

In March 2007 when Merial was issued a conditional U.S. Veterinary Biological Product License for a vaccine to treat canine melanoma, this was the first time that the U.S. government had approved a therapeutic vaccine to treat cancer in either animals or humans. In early 2010, the USDA granted full licensure to this vaccine, named Oncept. Oncept uses a DNA plasmid containing a gene for the human version of tyrosinase, a protein present on melanoma cancer cells in humans and dogs. After a dog is vaccinated with Oncept, some of the dog’s own cells will produce human-type tyrosinase. The vaccinated dog will then mount an immune response against human-type tyrosinase but will also attack the similar tyrosinase on melanoma cancer cells.

In a recent study, 58 dogs with Stage II or III oral melanoma received Oncept after local surgical removal/debulking of tumor masses. Dogs that received the vaccine had a significantly better survival time versus controls. Typical survival time for Stage II or III oral melanoma is 5 to 6 months or less with surgery alone.


EQUINE PRACTICE

Handbook and Brochure on Rehabilitating the Neglected Horse Available

In December 2009, the American Horse Council released the brochure, Caregiver’s Guide to Rehabilitating the Neglected Horse. It contains helpful information on how to bring a debilitated horse back to a healthy condition with minimal stress on the animal.

Included are sections on proper feeding, vaccination, deworming, and hoof care. Nutrena, Intervet/Schering-Plough Animal Health and the American Farrier’s Association contributed to the creation of this brochure.

In January 2010, the Unwanted Horse Coalition released a handbook, Best Practices: How Your Organization Can Help Unwanted Horses. The handbook lists pro-
grams and activities that many equine organizations, associations, service providers, and commercial suppliers have instituted to alleviate the problem of unwanted horses.

The handbook includes sections on administration, continuing education, fund raising, support of equine care facilities, placement, direct assistance, breeding control, and euthanasia. The intent is to outline the various examples of successful programs and activities for others to follow or to publicize.

Go to the Unwanted Horse Coalition Web site www.unwantedhorsecoalition.org to obtain copies of these two documents.


**Wyoming Legalizes Slaughter of Unclaimed Horses**

In March 2010, Wyoming Gov. Dave Freudenthal signed HB-122 Disposal of Livestock into Law, effectively allowing for the slaughter of abandoned horses in that state. The law gives several tools to the Wyoming Board of Livestock for handling livestock that fall under the board’s jurisdiction and that are classified as abandoned feral, abused, or estray (ownership cannot be established).

As before, these animals can still be offered for sale to the public. However, the new law also allows for the slaughter or euthanasia of abandoned or feral livestock animals.

The law does not pertain to wild horses protected under the Wild Free-Roaming Horse and Burro Act, which are under federal jurisdiction.

Although the law addresses issues pertaining to all species of feral, stray, and abandoned livestock, a primary motivation behind the legislation was to manage the growing problem of abandoned and unwanted horses, which not only caused a serious softening of the horse market but also has resulted in suffering and starvation of abandoned animals.

Furthermore, the number of unclaimed horses in Wyoming has tripled annually in recent years (news release, United Organization of the Horse [UOH]), since the closing of the three remaining horse slaughter plants in the United States (two in Texas, one in Illinois). These unclaimed horses have presented state authorities with an ongoing and expensive problem.

In previous years, the cost of gathering horses could be offset by offering these horses at sale to buyers. But with horse demand at historical lows, these stray horses, which are often of poor quality, often bring next to nothing at sale. Emergency funding has become necessary in the past to absorb the costs of feeding and boarding unwanted horses. With no alternatives on the table, solutions to Wyoming’s horse overpopulation problem have been hard to come by.

The legislation will allow the Wyoming Board of Livestock to have unnamed horses slaughtered for human consumption, with the meat being sold at cost to state institutions or charitable programs in Wyoming, or at market price to Wyoming retail consumers, with proceeds going to the Wyoming Department of Livestock-run program. The horse meat could also be marketed to zoos.

Jim Schwartz, director of the Wyoming Board of Livestock, said that the sale of unclaimed horses is much more preferable to slaughter, and that there are no plans to provide horse meat on an ongoing basis.

“The first priority is probably to sell the animal,” Schwartz said.

Alternatively, horse slaughter may occur in isolated situations where unwanted horses cannot be placed and there is a demand for meat.

However, “The Livestock Board does not anticipate getting into the meat business,” Schwartz said. “The legislation has given us options: we can continue to sell; we can send to slaughter; or we can dispose of the animal. Those are options we haven’t had in the past.”

Slaughtering horses for human consumption is still legal in all states except California, Texas, and Illinois. Proposed federal legislation, the American Horse Slaughter Prevention Act, strongly supported by Texas billionaire T. Boone Pickens, would have federally banned horse slaughter in 2007. But despite efforts by Pickens and other animal rights activists, this bill failed to pass in the Senate, and no federal ban was imposed.

Although slaughtering horses for human consumption is still technically legal in most states, it is practically unfeasible. This is because for the past several years, Congress has put a rider on appropriations measures that prohibits the use of funds or user fees for the inspection of horse meat meant for human consumption. In other words, the USDA will neither pay nor accept payment for inspectors overseeing the processing of horse meat bound for human consumption. With no USDA inspection, no horse meat can be sold over state lines, unless it is for the far less lucrative zoo meat market.

Processing zoo meat does not bring sufficient returns to justify the existence of a horse packing plant. The product previously sold out of the Texas and Illinois plants was destined for sale primarily in Europe and Japan, where horse meat fetches a premium.

The Wyoming legislation circumvents the ban on USDA inspection of horse meat by authorizing the slaughter of unclaimed horses by state-inspected facilities. Wyoming, like many western states, has its own
state-run meat inspection program. Processing facilities and horse meat would be inspected by the Wyoming Department of Agriculture, which has standards that meet or exceed those of the USDA.

Although state inspections preclude selling any horse meat over state lines, the Wyoming Board of Livestock would be free to sell horse meat for human consumption within the state, and to export meat for zoos to any state of its choosing.

“There’s absolutely nothing preventing us from slaughtering a horse in Wyoming and using the meat in Wyoming after it’s been through a Wyoming-inspected slaughter plant,” said Sue Wallis, executive director of UOH.

The Wyoming legislation is revolutionary in that it allows the Wyoming Board of Livestock to take the expensive problem of horse overpopulation and use it as a resource for providing needy people with inexpensive, high-quality food. Although the board does not intend to use the slaughter as either a primary or an ongoing means of horse control, the presence of this option signals a shift in thinking about horses and their appropriate uses for humans.

This experiment also goes beyond a rethink of how to manage the horse issue. Parties helping shape the legislation also aim to develop a model for processing horses humanely, which will make the practice more widely acceptable to the public. UOH is coordinating a working group that includes state agencies, private meat processing businesses, nonprofit relief organizations, animal behavior specialist Temple Grandin, veterinarians, and other experts. They are working to design a system for processing horses and for the efficient and practical use of valuable meat and byproducts.

The product of this working group will be a pilot Equine Assurance Program that will serve as an example for other states to use to address animal welfare concerns, and will ensure the humane handling, transportation, and processing of horses. It is also designed to address meat quality issues.

The new Wyoming legislation is an attempt, at least in part, to solve the horse overpopulation problem common in many western states. Although there are no plans for the Board of Livestock’s slaughter option to be used regularly, what is unique about the Wyoming legislation is that it is based on the key assumption that horse slaughter is an acceptable, humane practice and that horse meat can be a food source, not just for foreigners, but for Americans as well.

Wallis anticipates that this shift will not be welcome in all quarters: “Of course there will be . . . an uproar from the animal rights folks, and that’s to be expected,” she said. “Their whole agenda is to shut down animal agriculture completely. They know that horses are the point of the spear because they can convince urban people that horses are like cats and dogs.”
