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## “Harvest in Harmony” Workshop in Jacksboro

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To assist landowners and energy companies understand some of the easement, safety and liability issues on the land, the Chisholm Trail Resource Conservation and Development (RC&D), is hosting a “Harvest in Harmony” workshop.

The workshop will be held Tuesday, December 8th at 6 p.m. at the Concerned Citizens Building in Jacksboro, Texas. The free workshop is being sponsored by the Chisholm Trail RC&D, the USDA Natural Resources Conservation Service (NRCS), the Association of Texas Soil and Water Conservation Districts, Texas Excavation Safety System (Dig Tess), Texas Commission on Environmental Quality, Texas AgriLife Extension, Jack County WCID #1 and the Texas Land and Mineral Owners Association.

“As there is an increased demand for energy resources, landowners are faced with the challenge of balancing their natural resources with the impact of energy production,” says the CTC&D Executive Board. “With proper planning and information, landowners can save themselves and development companies a lot of headaches, time and money in the long run.”

NRCS representatives will address available conservation programs, land treatment methods, watershed program dams and landowner considerations when leasing conservation treated land for other developments. Landowners should consider existing conservation practices and easements when initial negotiations are being developed with private companies to access their land and explore for fossil fuels, install pipelines, transmission lines, or other means of development.

John McFarland of Graves, Dougherty, Hearon and Moody law firm and a representative of Texas Land and Mineral Owners Association will

discuss negotiating oil and gas leases. Warren Samuelson, Dam Safety Program Coordinator for the Texas Commission on Environmental Quality will discuss dam safety requirements and new laws governing dam safety and Jim Bob Simms, Damage Prevention Manager for the Texas Excavation Safety System will discuss excavation safety and the One Call center.

Workshop attendees will be provided with valuable information including soil data, maps, landowner’s property rights and responsibilities regarding existing contracts and easements, and a sample oil and gas leasing agreement.

Please call the Chisholm Trail RC&D office at (940) 872-5329 ext. 4 or email us at [chisholm-trailrcd@hotmail.com](mailto:chisholm-trailrcd@hotmail.com) to RSVP for this workshop. Based in Bowie, the Chisholm Trail RC&D is a non-profit organization that works to enhance the rural economy and environment through conservation and development of resources in North Central Texas. For more information on the Chisholm Trail RC&D, visit our website at [www.chisholmtrailrcd.org](http://www.chisholmtrailrcd.org). More information about NRCS, as well as USDA Service Center locations, can be found at <http://www.tx.nrcs.usda.gov>.

“With proper planning and information, landowners can save themselves and development companies a lot of headaches, time and money in the long run.”

Anyone wanting this newsletter by email please send me a note at the above address and I will put your name on the list, if you want a mailed copy be sure to add your correct mailing address.

Thank you,  
Heath Lusty, BS, MS  
County Agent  
Agriculture & Natural  
Resources.



## *Disease may play role in quail decline*

Source: *Texas A&M AgNews*, Writer – Steve Byrns

Disease may be playing a role in the demise of Texas quail, said a Texas AgriLife Extension Service expert. “Quail season has been disappointing,” said Dr. Dale Rollins, AgriLife Extension wildlife specialist at San Angelo. “By Texas standards, wild quail hunting has been sub-par since 2006, and I’m wondering if disease might not be part of the puzzle. Certainly, it’s probably not the key reason, but I’m starting to suspect it may be a contributing factor.”

Rollins said coccidiosis (malady caused by parasitic protozoans of the digestive system) is often blamed, but exactly what disease might be behind the drop in quail populations, or even if there is a disease contributing to the problem, is currently unknown. He said there are other potential threats, including West Nile Virus, avian influenza, avian cholera and avian tuberculosis that may be factors. Sick quail don’t last long before something eats them, so disease surveillance in wild quail is a tough proposition, according to Rollins.

“I’ve always been intrigued by the possible role disease plays in quail dynamics,” Rollins said. “When you think about it, the birds offer a perfect biological fuse for disease spread among the population. They are social birds, and when a covey dwindles to less than about six birds, they go join another covey.

“Blue quail used to be common over areas as far east as Throckmorton, but they disappeared over much of their range in 1988; December 1988 to be exact in my opinion. While hunting in Crockett County that December, I dressed several birds with spotted livers, but didn’t think much of it. I just took some photographs and discarded the birds. Within months, blue quail had vanished as far west as the Pecos River. I can’t explain such a die-off except by some mystery disease. Suffice it to say my antennae are up for sick quail now.”

Rollins asks quail hunters to be on the lookout for sick quail this season. If birds taken are too light for their size or if a green discharge from the vent is spotted, he said it would be worth noting. He said to pay special attention to whether the liver has white or yellow nodules in it which are signs of a bacterial infection. If disease is suspected, Rollins asks hunters to place the bird in a plastic zipper-type bag, refrigerate it and call him as soon as possible at 325-653-4576 or 325-776-2615.

Rollins is also the director of the 4,700-acre Rolling Plains Quail Research Ranch at Roby. He said they are currently live-trapping quail at the ranch for leg-banding to support a radio telemetry project. At the same time, they also are collecting samples for disease and parasite testing. “We’ll submit about 200 samples for screening of viral, bacterial and parasitic diseases,” he said. “These data will help us better understand whether various diseases really are a factor.

“A separate research project on eye worms and intestinal parasites was started in September in collaboration with the Caesar Kleberg Wildlife Research Institute. Preliminary testing from quail collected on the research ranch last winter showed parasite infestation in the eyes, which may be noteworthy. When you’re a bobwhite, you live on the edge as it is; any debilitating factor like worms under your eyelids can’t be good.

“At the research ranch, we’re seeking to unravel just what’s happened to bobwhites and blue quail across much of the Rolling Plains,” he said. “We’ve adopted a philosophy of ‘leave no stone unturned.’ So, we’re investigating some heretofore overlooked agents, namely disease and parasites to see if they possibly are playing a more than minor role in the demise of Texas quail.”

## **Ag leadership class applications due March 15**

Source: *Texas A&M AgNews*

Texas Agricultural Lifetime Leadership Program is seeking applicants for its new class which will begin in June. TALL is a two-year leadership development program managed by the Texas AgriLife Extension Service. Applications for the newest class, Class XII, are due March 15. Application forms may be found online at <http://tall.tamu.edu>.

“Texas agriculture has a need for individuals who can lead our industry as it faces new and unique challenges. These individuals will provide the leadership, insight and direction to ensure the viability for the future,” said Dr. Jim Mazurkiewicz, AgriLife Extension leadership program director.

The age of applicants may be from 25-50 years, he said. The program invests 455 hours of intensive training per person in seminars, speakers and domestic and international trips over two years, Mazurkiewicz added. Class XII will travel to India.

The course is the equivalent of 38 credit hours or a master’s degree in agriculture. The typical class size is about 25, and tuition is \$2,000. Participants include traditional crop producers and ranchers, bankers and lawyers, as well as those who work in lumber and landscaping industries.

## **Horticulture Update on Aggie-Horticulture**

Drs. Douglas F. Welsh and William C. Welsh invite you to view the November-December issue of the electronic periodical [Horticulture Update](#) which is posted on the aggie-horticulture website (Extension Horticulture). To access this issue, go to:

<http://aggie-horticulture.tamu.edu/extension/newsletters/hortupdate/tamuhort.html>

The current issue contains articles on:

*All Plants Have a Place in Water Efficient Landscapes* - Dr. Douglas F. Welsh

*Possum-haw Holly (Ilex deciduosa)* - Dr. William C. Welch

*Christmas Cactus* - Cynthia W. Mueller

*Is This a Weed? Differentiating Garden Seedlings From Surrounding Weeds* - Dr. William C. Welch

*Upcoming Landscape Design Study Course IV: Feb. 22-23, 2010*

*Garden Checklist for November-December, 2009* - Dr. William C. Welch

## ***Pestman weed and brush online decision aid now available***

*Source: Texas A&M AgNews*

Pestman, a new online application for weed and brush control, is now publicly available, according to a Texas AgriLife Research scientist. "Pestman is a decision-support system that provides sound pest management options associated with weed and brush control, as well as costs associated with the options considered," said Wayne Hamilton, AgriLife Research range scientist and lead researcher with the Center for Natural Resource Information Technology. "This tool allows managers to analyze the economic and environmental risks associated with controlling pests invading forage lands."

The application is a collaborative effort of federal and state agencies, including U.S. Department of Agriculture-Risk Management Agency, New Mexico State University, AgriLife Research, Texas AgriLife Extension Service, the Texas A&M System, and private industry, including Grazingland Management Systems Inc., and AgForce consulting companies.

The new Pestman application was built with some previously existing tools for making range decisions, Hamilton said. "The old program used was known as EXSEL, which was created more than 20 years ago," Hamilton said. "It was still being used, but the problem was it got out of date as companies began to market the same (chemical) compounds under their (herbicide trade) name. It was never built in a database system where that information or costs for mechanical and chemical treatments could be updated easily."

Another feature not available in EXSEL was the ability to calculate economic outcomes when creating a scenario using mechanical or chemical brush or weed treatment alternatives, Hamilton said. "We wanted to bring an economic component into a single program combined with the technology selection capability," he said. "We had another decision support system that provided this capability, the Grazinglands Alternative Analysis Tool."

Hamilton said they wanted to make the tool available so users could develop an economic analysis and see what the cost would be over a 10-year to 20-year period. "Pestman is an integrated tool of all of these previous tools into one unified system," he said.

Loren Naylor, research assistant and one of the online tool's developers, said Pestman provides the user with cost estimates of mechanical and weed and brush treatments. "Costs of treatments are updated annually," he said. "This tool provides the treatment with an example forage response curve that can be easily modified to mimic forage response specific to the user's range condition."

The user starts by selecting the pest plant, state of residence (currently only valid in Texas and New Mexico), and plant density. The Pestman program returns the best available treatments and their effectiveness along with cost per acre and application rates for chemical treatments. The user is then asked to select a treatment alternative.

"The user may build or adjust an estimated forage increase graph in Pestman which helps calculate the cost-benefit ratio and net present value of the selected treatment or treatments over a maximum 20-year planning horizon," Naylor said. The user then adds improvement profiles, including any desired maintenance treatments. Finally, the user enters their enterprise budget with specific informa-

tion regarding their grazing enterprise.

Pestman uses forage response curves "in combination with user-specific enterprise data and treatment scenarios to calculate an economic summary, including net present value and internal rate of return on the selected investment scenario compared to no treatment," Naylor said. "These data can be downloaded and compared to other scenarios."

The Pestman decision support system was approved by the U.S. Department of Agriculture-Risk Management Agency earlier this fall and is available online for producers, range consultants and others in the brush and weed control industry. It can be found at <http://pestman.tamu.edu>.

## **K-STATE RESEARCHERS STUDYING LINK BETWEEN CLIMATE CHANGE AND CATTLE NUTRITIONAL STRESS** *Source: Kansas State University*

Kansas State University's Joseph Craine, research assistant professor in the Division of Biology, and KC Olson, associate professor in animal sciences and industry, have teamed up with some other scientists from across the United States to look into the possible effects of climate change on cattle nutrition.

Comparing grasslands and pastureland in different regions in the U.S., the study, published in *Global Change Biology*, discusses data from more than 21,000 different fecal samples collected during a 14-year period and analyzed at the Texas A&M University Grazingland Animal Nutrition Lab for nutritional content. "Owing to the complex interactions among climate, plants, cattle grazing and land management practices, the impacts of climate change on cattle have been hard to predict," said Craine, principal investigator for the project.

The lab measured the amount of crude protein and digestible organic matter retained by cattle in the different regions. The pattern of forage quality observed across regions suggests that a warmer climate would limit protein availability to grazing animals, Craine said. "This study assumes nothing about patterns of future climate change; it's just a what if," Olson said. "What if there was significant atmosphere enrichment of carbon dioxide? What would it likely do to plant phenology? If there is atmospheric carbon dioxide enrichment, the length of time between when a plant begins to grow and when it reaches physiological maturity may be condensed."

Currently, cattle obtain more than 80 percent of their energy from rangeland, pastureland and other sources of roughage. With projected scenarios of climate warming, plant protein concentrations will diminish in the future. If weight gain isn't to drop, ranchers are likely going to have to manage their herds differently or provide supplemental protein, Craine said. Any future increases in precipitation would be unlikely to compensate for the declines in forage quality that accompany projected temperature increases. As a result, cattle are likely to experience greater nutritional stress in the future if these geographic patterns hold as a actual example of future climates, Craine said.

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"The trickle-down to the average person is essentially thinking ahead of time of what the consequences are going to be for the climate change scenarios that we are looking at and how ranchers are going to change management practices," Craine said. "In my opinion these are fully manageable changes," Olson said. "They are small, and being prepared just in case it does happen will allow us to adapt our management to what will essentially be a shorter window of high-quality grazing."

Additional investigators on the project include Andrew Elmore at the University of Maryland's Center for Environmental Science and Doug Tolleson from the School of Natural Resources at the University of Arizona, along with the assistance of Texas A&M's Grazingland Animal Nutrition Lab.

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**Jack County**

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