

BROOKINGS — With calving underway, next year's calf crop may be the last thing cattle producers are thinking about, but according to Robin Salverson, SDSU Extension Cow/Calf Field Specialist, it's never too late.

With bull sales underway and 2015 AI beef sire directories available, it is time to think about breeding season - especially if you will be using synchronization," Salverson said. "Depending on which protocol is selected, it could be more than 39 days from start of the program to artificial insemination. This means, if you begin breeding May 13 for a February 10 calving date, you will need to start synchronizing heifers April 3.'

Based on research data and field use the Beef Reproduction Task Force composed of representatives of AI and pharmaceutical companies, veterinarians, and reproductive specialists, have developed a list of synchronization protocols recommended for heifers.

'There are some great apps available to cattle producers that provide synchronization and breeding calendars for both heifers and cows," Salverson said. 'Take note that not all protocols are for both cows and heifers. There is a difference in physiological response between heifers and cows. It is important that you do not use a cow protocol on heifers.'

Likewise, Salverson said producers need to follow the protocol, give the proper hormone injection or insert at the right time and don't expect to jump start all heifers that are not cycling.

She encourages producers to follow Beef Quality Assurance guidelines when giving injectable hormones. Giving the injection in the rump because it is administered "closer to the ovary" of the heifer does not increase the efficacy or speed of the hormone, Salverson explained. "All drugs must enter the blood system and travel to the heart and lungs before reaching the target organ (i.e. ovaries)."

She reminded cattle producers that the adage more is always better does not work with melengestrol acetate (MGA). "First, it is illegal to use MGA off label. Secondly MGA is absorbed in the fat and will take longer to clear from the heifer's system when fed at a rate higher than 0.5 mg per head per day creating problems with estrus (heat) responses and subsequent timing of prostaglandin injection," she said.

When handling all hormones, including CIDR, Salverson said cattle producers need to wear latex or

non-latex gloves regardless of gender. "It doesn't matter if you are a male or female, you need to protect yourself from these hormones," she said. "For example, prostaglandin is a smooth muscle contractor, our intestines are the largest smooth muscle in the human body. If prostaglandin is absorbed through the skin it can "tie up" the digestive system.'

She added that hormones function in the human body like they do in a heifer therefore, extreme care should be taken when handling all synchronization hormones.

Protocols

Because there are several protocols for heifers, Salverson said each protocol has been put into one of three categories: 1) Heat Detection Protocol; 2) Heat Detection and Time AI Protocol and 3) Fixed Time AI Protocol.

Heat Detection Protocols: Heifers in these protocols should be inseminated 6 to 12 hours after the first observation of standing heat., Heat detection should occur during peak heat activity (48 to 72 hours after prostaglandin injection), 3 times per day

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2015 Synchronization Protocols Increased Trade Means **Increased Opportunity**

In 2013, South Dakota exported almost \$1.6 billion worth of goods to countries around the world. International trade has an incredible impact on the agricultural economy of our state. Soybeans, corn, wheat, and livestock, including pork and cattle are among the top 25 goods shipped from South Dakota overseas.

2015 holds numerous opportunities to grow international trade opportunities for South Dakota producers. Currently, the Office of the U.S. Trade Representative (USTR) is negotiating two vital trade agreements with many of our top trading partners around the world.

The Trans-Pacific Partnership (TPP) is a trade agreement currently being negotiated between the United States, Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. Seventy-three percent of all exports from South Dakota end up in TPP countries. Expanded access to these markets means expanded opportunities for South Dakota producers.

The U.S. is also in the midst of negotiating a trade agreement with the European Union.

The Transatlantic Trade and Investment Partnership (TTIP) will hopefully provide both expanded access to European markets and better facilitation of existing trade relationships by ensuring a fair and transparent trading process. According to USTR, if both TPP and TTIP are successfully implemented, the U.S. will have free trade agreements with 65 percent of the global economy.

South Dakota also faces new market opportunities with the reestablishment of diplomatic relations between the U.S. and Cuba. While the trade embargo is still in effect, officials from both countries sat down this month to begin talks about lifting the embargo. Open trade with Cuba would open new markets both for South Dakota agricultural products and technology.

The coming months will hopefully bring many new opportunities for South Dakota producers to get their products to market in countries across the world. With these increased opportunities, South Dakota producers can continue to feed the world.

South Dakota Department of Agriculture

Calf Takes A Dip In Farmer's Hot Tub

ROSSVILLE, Ind. (AP) — A central Indiana farmer jumped into a hot tub with a shivering baby cow to save the calf's life.

Čarroll County farmer Dean Gangwer tells WRTV-TVthat he thinks one of his cows gave birth in the snow. He said he found the barely breathing newborn in a snowbank this week.

The third-generation farmer says he decided the quickest way to warm up the calf, named Leroy, would be to use his hot tub. Gangwer says he "jumped in fully dressed and held Leroy up so he didn't drown." Gangwer then took the calf inside and wrapped him in electric blankets.

Leroy is recovering and has started to nurse.

Gangwer said Leroy is "done hot-tubbing" but "sunbathing is definitely in his future out in the grass.'

South Dakota Farm Sizes Triple That Of The Rest Of The U.S.

BROOKINGS — The USDA recently published the Farms and Land in Farms - 2014 Summary which classified average arm size in the U.S. by sales class

there were negligible changes for groups 2 and 4 of less than negative 0.01 percent.

Group 3 with 4,400 farms (13.9 percent of the total) showed a retraction (-2.2 percent) in numbers from the year before. This group has 5.5 million acres in farms with al average size of 1,250 acres per farm. Farms in Group 4 with 3,500 (11 percent of the total) dropped by 7.9 percent, had 7.2 million acres in farms with an average of 2,057 acres per farm. Farms in Group 5 with 3,300 (10.4 percent of the total) increased by 13.7 percent, had 11.2 million acres in farms and an average of 3,394 acres. Finally, Group 6 with 2,500 (7.9 percent of the total) increased by 4.2 percent, with 13.1 million acres in farms and an average of 5,240 acres. "From this analysis it can be inferred that in South Dakota it is again Group 1 (negative 6.7 percent) which has the greatest risk to its sustainability," Garcia said. "Group 2 on the other hand showed an interesting, encouraging growth since 2013.'

This 2014 summary showed the U.S. had 2.08 million farms. South Dakota had 31,700 farms in 43.3 million acres with an average farm size of 1,353 acres. This compared to a nationwide average of 438 acres per farm and a total of 913 million acres in farms.

"Farm numbers and size follow similar trends when compared to livestock and other operations, with numbers dwindling while size increases," said Alvaro Garcia, Agriculture and Natural Resources Program Director & Professor.

Garcia explained that the USDA classified farm numbers and land in farms in six economic classes by adding up sales of agricultural products and government program payments. These classes are as follows:

Group 1. \$1,000-\$9,999; Group 2. \$10,000+; Group 3. \$100,000+; Group 4. \$250,000+; Group 5. \$500,000+; and Group 6. \$1,000,000

"Between 2013 and 2014 the only group that declined in numbers was group 1 with all others increasing," Garcia said.

He went on to explain that groups 3 and 5 had the largest increases at 1.4 percent and 3.6 percent, respectively. "The majority of farms in the U.S. are smaller operations," he said, noting that 51 percent of all farms in the U.S. fall into group 1 with 80 percent included within groups 1 and 2.

'There are slightly over 1 million farms in group 1. When group 2 is combined with 1 the number climbs to 1.66 million," he said. "Groups 3 through 6 on the other hand constitute only 19.6 percent of the total."

Average acres farmed by each group are as follows: Group 1. 86 acres;

- Group 2. 312 acres; Group 3. 889 acres;
- Group 4. 1,290 acres;
- Group 5. 1,887 acres; and
- Group 6. 2,655 acres.

'One additional interesting figure is the change in acres in farms by the different groups. Groups 5 and 6 increased their acreage significantly. Groups 1 and 3 had the largest reductions with negative 4.5 percent and negative 1.5 percent, respectively," Garcia said. "Interestingly enough,





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What this says about South Dakota's farms

"South Dakota is clearly an agricultural state, farm size triples that of the rest of the U.S. with one farm every 25 people compared to one every 154 for the nation" Garcia said.

Garcia summarizes South Dakota results of the survey below:

Group 1 had 8,300 farms (26.1 percent of the total), had 1.2 million acres in farms, with a farm size on average of 145 acres. This group decreased by 6.7 percent since last year

with acres per farm remaining almost unchanged. Group 2 had 9,700 farms (30.6 percent of the total) during 2014, with 5.1 million acres in farms, and an average farm size of 526 acres. "Group 2 in South Dakota had 68.6 percent more land per operation for the same amount of sales compared to the rest of the country. In spite of this "apparent inefficiency" this group however increased farm numbers by 2.1 percent since 2013," Garcia said.

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