EQUINE BREEDING CLINIC
Thursday, January 24th, 2002
7:00-9:00 PM
Marion County Agriculture Center
2232 NE Jacksonville Road, Ocala
(352) 620-3440

Topics
Managing the Estrus Cycle
Ultrasonography: Monitoring the Estrus Cycle

Speakers
Saundra TenBroeck, Ph.D.
UF Department of Animal Sciences

Dan Sharp III, Ph.D.
UF Department of Animal Sciences

Equine Education Courses
Marion County Extension will offer two Equine Care and Technology courses, Basic and Advanced, beginning Monday, January 28th, 2002.

Basic topics include: anatomy and conformation, equine nutrition, herd/health and first aid, handling horses and restraint, breeding, foaling, as well as barn management and farm safety.

Advanced Course This course is designed to expand the knowledge of equine industry professionals. Classes for this course change each year and have included such topics as advanced reproduction, animal welfare, horse farm economics, genetics, ethology-the study of equine behavior, performance horse lameness, advanced equine nutrition, and preventative medicine, etc.

Each course consists of nine sessions. Classes will meet at Central Florida Community College beginning Monday night January 28th, 2002, from 6-9 p.m. The community College is located on SR 200 in Ocala. Cost for each class is $55.00.

For more information contact Mark Shuffitt at (352) 620-3440, or the Continuing Education Department of Central Florida Community College at (352) 237-2111.
46th Annual Ocala Graded Bull Sale Report

All bulls are evaluated on weight, condition, conformation, scrotal circumference and EPD’s then assigned a grade from A+ to C. Bulls that do not score a C or higher are sifted from the sale.

One hundred forty-four bulls representing eight breeds sold for an overall average of $1552 at the 2002 Marion County Cattleman’s Association Annual Graded Sale. This year’s sale toppers lot #79 (A-) and lot #76 (B+) (a pair of Brahman bulls) consigned by Hidden Springs Farm of Williamson, GA sold for $4,000 and $3,500 respectively. Two Brothers Charolais received $3,000 for lot #87, an A- graded bull. Lot #92 an A- graded Charolais consigned by Little W Farms of Lebanon, TN sold for #2,800. In addition, thirteen other bulls sold for $2,000 to $2,500 and 23 bulls sold for a price of $1,800 to $1,950.

This year (9) A graded bulls averaged $1,733 and (25) A- bulls averaged $1,786. Thirty-two B+ graded bulls sold for an average price of $1,715 and (27) B graded bulls averaged $1,557. Twenty-five B- graded bulls sold for an average of $1,374. Fifteen C+ bulls averaged of $1,320. Only eleven bulls received a C grade and brought an average price of $1,109.

Breed averages were as follows:

⇒ 22 Angus sold for an average of $1,386
⇒ 15 Red Angus sold for an average of $1,402
⇒ 14 Braford sold for an average of $1,243
⇒ 15 Brangus sold for an average of $1,983
⇒ 15 Charolais sold for an average of $1,970
⇒ 10 Gelbvieh sold for an average of $1,575
⇒ 27 Hereford sold for an average of $1,746
⇒ 20 Polled Hereford sold for an average of $1,200

The Marion County Cattleman’s Association would like to THANK everyone who had a part in making this sale possible. A special THANK YOU to our volume buyers Flying “P” Ranch, Dunnellon; G&M Cattle, Ocala; Kirton Ranch, Okeechobee; Ventura Ranch, Wildwood; Frank Smith, Weirsdale and John Graham, Webster. We hope to see all of you again at next year’s 47th Annual Ocala Bull Sale, The Oldest Graded Bull Sale in the Nation.

John Mark Shuffitt
Livestock Agent II

Pasture Management Seminar

Tuesday, February 19th, 2002
7:00-9:00 PM
Marion County Agriculture Center
2232 NE Jacksonville Road, Ocala
(352) 620-3440

Topics
Soil Sampling & Fertilization
Establishment & Maintenance of Bahiagrass
Weed Control
and
Plants That Poison Farm Animals

Speakers
Sam Albritton, Southern States Co-op
Dennis Mudge, Orange County Extension
Mark Shuffitt, Marion County Extension

Evaluation of the Mare and Foal at Birth

Michael B. Porter, DVM; University of Florida

The Postpartum Mare

There are several medical complications that can occur in mares post-foaling. These include retained placenta, excessive bleeding, vaginal trauma, colic and inadequate udder “bag” development.

If the placenta is still attached to the mare, tie the tissue into a knot but do not attempt to pull free from the mare. Pulling on the placenta may result in tearing the placenta and allowing for a small portion to remain within the mare. This would result in a very sick mare, which would require intensive medical treatment for multiple days. Normally the placenta is expelled at the time the foal is born, however it may remain attached for up to 3 to 5 hours and still be considered normal. If the entire placenta has not passed within 6 hours, a veterinarian should be summoned. If the placenta or a portion of the placenta remains within the mare and the mare is not treated medically, it is reasonable to expect a sick horse, which may not survive. Once the placenta has passed from the mare, it should be examined. Visual evaluation of the placenta may reveal evidence of problems before foaling and/or during foaling. First, care should be taken to determine if the entire placenta is present. If an area of tissue appears to be missing, especially at the tips of the horns, a mare should be evaluated by a veterinarian for evidence of a retained portion of the placenta. In addition, the presence of an area that is abnormal or different compared to the rest of the placenta, such as the presence of “pus” may suggest a potential problem. Admittedly one must see multiple normal placentas before recognizing an abnormal

⇒ 10 Gelbvieh sold for an average of $1,575
⇒ 15 Braford sold for an average of $1,243
matter. Hence, if there is any question, the placenta should be kept in a refrigerator until a veterinarian can examine it. A final note concerning the placenta, if only a portion of the placenta appears to be present the possibility of twins should always be considered and the appropriate measures taken to investigate the matter.

In addition to a retained placenta, the act of foaling (parturition) can result in excessive bleeding from the mare’s reproductive tract. This condition can be difficult to diagnose without trans-vaginal palpation and/or ultrasound by an experienced veterinarian. Admittedly, a veterinarian is generally not present at the time of foaling unless a problem is expected. Therefore, as an owner/manager signs to look for include depression, a sustained elevation of heart rate (>60 beats per minute), continual bleeding from the vagina, colic, pale mucus membranes (gums), and unusual weakness. This condition is the most critical medical emergency post-foaling because mares can die within hours of foaling. If such a condition is suspected, the mare should not be disturbed and a veterinarian should be summoned immediately. Furthermore, continued observation of the mare is imperative because severe blood loss can result in collapse of the mare, with disregard of the foal whereabouts, thus endangering the foal.

Vaginal trauma due to foaling occurs more frequently than excessive bleeding. As the foal passed from the uterus to the outside world, it must travel through the vagina, which is in the pelvic canal. Typically, the foal passes forefeet forward and nose first. As it passes through the vagina, it may begin to struggle due to the narrowness of the pelvic canal. Struggling by the foal can result in trauma to the vaginal wall, rectal wall, vestibule and/or vulvar lips. It is important that if the mare had a caesarean procedure post-breeding that it be removed well in advance of the expected foaling date. Trauma to the mare’s reproductive tract is typically only apparent to the manager/owner if the vestibule and/or vulvar lips were involved. There may be an obvious tear in the vulva or excessive swelling and bruising may be seen protruding through the vulvar opening. If there were a vaginal or rectal-wall tear, examination by a veterinarian would be necessary for diagnosis. Irrespective, it is a good idea, if feasible, to have the mare evaluated within 24 hours post-foaling for signs of trauma to the reproductive and/or gastrointestinal tract.

Not surprisingly, mare might colic post-foaling. Some broodmare owners prefer to feed a warm bran-mash to their mares after foaling. The idea of providing the mare with a natural cathartic, immediately post-foaling, may not be required however it does not harm and is considered a good idea by some, if the mare begins to colic, all feed should be removed from the mare and a veterinarian summoned. Colic-like behavior should not be over looked in the post-partum mare. Rather it should be treated accordingly, especially considering that the types of colics which tend to occur post-foaling may be more serious than others.

Finally, the mare’s udder should be evaluated pre- and post-foaling. If it is a maiden mare, she may not develop an udder until shortly after the foal is born. It is important to determine if she is producing sufficient nutrition for the newborn foal. There are pharmacological agents available to veterinarians that may help in udder development. Equally important is evaluation of the “first milk” otherwise known as colostrum. I will refer you to the paper by Dr. LeBlanc which reviews this subject in detail. If the mare developed a “bag” several weeks before foaling and began to drip milk from that udder, it may be assumed that the first suckle will not contain sufficient IgG’s for transfer of immunity from the mare to the foal. If this is the case, appropriate measures should be taken to provide the foal with an alternative source of immunity, such as colostrum or plasma.

The Newborn Foal

There are several parameters of newborn foals that may be considered normal guidelines. These include the following:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Normal Value</th>
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<tbody>
<tr>
<td>Suckle reflex</td>
<td>2 to 20 minutes</td>
</tr>
<tr>
<td>Sternal recumbency</td>
<td>1 to 2 minutes</td>
</tr>
<tr>
<td>Time to stand</td>
<td>1 to 2 hours</td>
</tr>
<tr>
<td>Time to nurse</td>
<td>2 hours</td>
</tr>
<tr>
<td>Temperature</td>
<td>99 to 101.5F</td>
</tr>
</tbody>
</table>

Excessive prolongation of any of these parameters should be considered abnormal and care should be taken to evaluate the newborn foal more closely.

As in the mare, there are several medical complications that can occur in the foal after foaling. Further more, there are procedures that are recommended in all foals during the first 24 hours of life. The medical conditions to be concerned with include failure of passive immunity transfer, colic (impacted meconium), diarrhea, ruptured urinary bladder (colts), tendon abnormalities (contracted tendons), and oxygen deprivation during foaling (“Dummy foals”).

One of the first procedures involves treating the umbilical stump after foaling. Historically, treatment with tincture of iodine (3-7%) has been recommended on the first day followed by daily dipping with more dilute iodine. However, recently the use of chlorhexaderm has been advocated to avoid the potential scalding due to tincture of iodine and to reduce bacterial colonization of the umbilical stump. Regardless of the method, the author strongly advises treating the umbilical stump for the first 7-10 days of life.

Of critical importance is the foal ingesting good quality colostrum in the first 8 hours of life. Beginning 12 hours after foaling, the ability of the foal’s stomach to absorb colostrum begins to decline and the probability for failure of immunity transfer increases significantly. Therefore, if there is a concern regarding the quality and/or quantity of colostrum ingested by the foal, an IgG test should be performed between 8 to 12 hours post-foaling. If the concentration of IgG’s is less than or equal to 400 mg/dl, the foal needs to be supplemented preferably with IV plasma. If the level of IgG’s is between 400 and 800 mg/dl it may depend on the owner/manager and the veterinarian whether the foal is supplemented. It is important to remember that the colostrum provides the foal with all the antibodies it will need for the first 3-4 months of life. Not until after 3 months, will the foal’s immune system begin to produce antibodies. Therefore, an inadequate intake of IgGs at birth may increase the foal’s predisposition to diseases for the first 3-4 months of life.

In addition to ingesting colostrum, passage of the meconium (first feces) typically occurs in the first 12 hours of life. Generally, the meconium is pasty and has a dark-brown appearance, which is in contrast to the lighter-brown color of milk feces. Administering an enema to the foal enemas may be used however care must be taken into administrate more that 1 to 0 Fleet enemas. Stallion catheters can be adapted easily for this use. Care should be taken in not forcing the tube nor administering excessive fluid. If the foal begins to colic, it may be due to impacted meconium or a number of other intestinal abnormalities. Regardless, it is a medical emergency and a veterinarian should be summoned.

Another medical abnormality in the newborn foal is diarrhea. Although they may develop diarrhea at 7-12 days of life, associated with “foal heat”, it is not normal for a foal to develop diarrhea in the first 24 hours of life. This condition needs to be evaluated by a veterinarian if it persists. The owner/manager can evaluate the diarrhea by observing the foal’s mentation, nursing (see Evaluation of the Mare and Foal at Birth pg. 4)
Evaluation of the Mare and Foal at Birth

frequency, and monitoring its body temperature twice per day. If the foal is depressed, not nursing, has a fever and diarrhea; the foal is in need of medical attention.

A ruptured urinary bladder is another condition that will cause depression in the newborn foal. This is more common in colts than fillies and may occur while the foal is passing through the tight, pelvic canal. The owner/manager may notice the foal is constantly straining to urinate, is growing increasingly depressed, and the foal's abdomen may increase in size. This condition will cause death to a foal if not treated immediately. An important point to make is that when handling newborn foals, especially colts, care should be taken not to apply excessive pressure in the abdominal region. Cases of ruptured urinary bladders due to human handling are not rare.

Occasionally, foals are born with tendon abnormalities. Typically this involves contraction of the flexor tendons, which results in difficult rising and walking for the foals. Depending on the severity, this condition can be treated medically by a veterinarian. However, because these foals have such trouble in moving around, they must be provided with help during nursing to guarantee adequate colostrum and nutrient intake.

Finally, difficulty during the foaling process may initiate periods of oxygen-deprivation in the foal. If the foaling was not witnessed, the owner/manager may not suspect anything especially because these foals tend to act normal at birth. Careful examination of the placenta may provide clues concerning potential problems during foaling. During the first 24 hours post-foaling, the foal will become increasingly depressed or sleepy, will lose its suckle reflex, and will develop signs of incoordination. These foals have been termed “dummy foals” and require immediate and extensive supportive care.

There are numerous other conditions that afflict the newborn foals and their dams, however for the sake of brevity, I have only covered the most common problems. As a final note, it is the author’s opinion that the owner/manager can minimize the incidence and/or severity of medical conditions by carefully and consistently evaluating the health of the mare and foal.

Beef Cattle Management Tips

FEBRUARY

- Top dress winter forages, if necessary
- Check and fill mineral feeders
- Put bulls out with breeding herd
- Work Calves:
  1. Identify
  2. Implant with growth stimulant
  3. Vaccinate
- Provide adequate nutrition to lactating cows
- Check calves for signs of respiratory disease
- Cull cows that did not calve
- Check for lice, treat if necessary
Measure of Length
4 inches = 1 Hand
7.92 inches = 1 Link
18 inches = 1 Cubit
12 inches = 1 Foot
6 feet = 1 Fathom
3 feet = 1 Yard
5 ½ Yards = 1 Rod or Pole
40 Poles = 1 Furlong
8 Furlongs = 1 Mile
69 1/8 Miles = 1 Degree
60 Geographical Miles = 1 Degree
1,760 Yards = 1 Mile
5,280 feet = 1 Mile

Dry Measure
8 Quarts = 1 Peck
4 Pecks = 1 Bushel
8 Bushels = 1 Quarter
36 Bushels = 1 Chaldron
1 Bushel = 2,150.42 Cubic Inches

Measure of Solidarity
1,728 Cubic Inches = 1 Cubic Foot
27 Cubic Feet = 1 Cubic Yard

Measure of Surface
144 square Inches = 1 Square Foot
9 Square Feet = 1 Square Yard
30 ¼ Square Yards = 1 Square Rod, Perch or Pole
40 Square Rods = 1 Square Rood
4 Square Roods = 1 Square Acre
Gunther’s Chain = 22 Yards or 100 Links
10 Square Chains = 1 Square Acre
640 Square Acres = 1 Square Mile
272 ¼ Square Feet = 1 Square Rod
43,560 Square Feet = 1 Acre

Miscellaneous Tables
196 pounds of flour = 1 barrel
200 pounds of beef = 1 barrel
135 pounds of apples = 1 barrel
280 pounds of salt = 1 barrel
135 pounds of potatoes = 1 barrel
350 pounds of sugar = 1 barrel
100 pounds of nails = 1 keg
231 Cubic Inches = 1 gallon
1/3 inch equals one size in measuring shoes
Wallpaper is usually 18 inches wide
A single roll is 24 feet long
A double roll is 48 feet long