The Journal's three-part series concludes with what to expect with your mare's special delivery and newborn foal.

By ABIGAIL BOATWRIGHT

Tou've made it through the last 340 days—give or Y take—of your mare's pregnancy without a hitch, carefully managing her nutrition and veterinary care in preparation for the birth of your first foal. What do you do now that your mare is preparing to foal? Experienced APHA breeder Ann Stockstill of Winona, Texas, teamed up with the Paint Horse Journal to share her labor and delivery routine with readers, and Reproduction Specialist Chelsea Makloski, D.V.M., of Whitesboro, Texas, also shares vital tips in the final installment of this three-part series.



• 24 Hours to Go •

About 24 hours before your mare gives birth, Stockstill says you'll notice waxy beads of colostrum building up on the tips of her udders. Some mares may not exhibit these signs though, so Makloski says to watch for other symptoms.

"Oftentimes, right before foaling, the mare will be somewhat restless and pacing the stall," Makloski said. "She'll wring her tail, urinate more and might have an increased respiratory rate."

Stockstill prefers to deworm her mare with an extra dose of ivermectin 24 hours before the foal is born to prevent threadworm development. If you choose to do so-acting on your veterinarian's advice-make sure the dewormer you use is safe for pregnant mares. This information is typically listed on the box.

Predicting when the birth will occur is tricky, so Makloski recommends maintaining your facility and a consistent deworming program to prevent excessive worms in your new foal's environment.



If you haven't already done so, collect the items you need for your foaling kit. The PHJ outlined your foaling kit checklist in detail last month.

· She's in Labor-Now What? •

Once a mare starts showing signs of labor, Stockstill washes her udder, teats and vulva with mild soap and warm water, and wraps her tails with Vetrap to keep stray hairs out of the way.

While Makloski advocates wrapping your mare's tail, she recommends letting the horse focus on foaling without interruption. Ask your veterinarian for his recommendation.

"Any delay in labor, such as from stressing the mare, could result in problems getting oxygen to the foal," Makloski said. "Washing the udder just prior to birth could also stimulate milk production and disturb the teat canal. Plus the mare will be up and down during the foaling process and will contaminate the area again. So I would wrap the tail if you can, but then get out of the mare's way. You can always clean the udder and vulva after the birth."

Labor is broken down into three stages.

"Stage one is when the foal is getting into position," Makloski said. "The cervix is starting to soften and dilate. Everything is getting ready for the foal to enter the birth canal."

You might not even notice stage one because there aren't any external signs of labor itself, other than the mare's increased restlessness. Maiden mare are sometimes more nervous during this stage.

Stage two labor is visible. Essentially the birth of the foal, this stage occurs quickly in most cases. During labor, any pressure the foal puts on the cervix creates the Fergeson reflex, a response that induces large doses of the hormone oxytocin, which causes strong contractions that push the foal through the birth canal. 'Generally we will see feet first," Makloski said. "The foal

will come out head and front feet first. You'll see one foot

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and the other immediately behind it. About mid cannon bone, you should start to see the nose. Once the head is through, the mare is going to push the rest of the body out fairly quickly."

Once the foal has passed, stage two ends. Stage three of labor involves passing of the placenta.

• Newborn Duties •

As soon as the foal is born, keep a close watch on its breathing and clear the foal's nostrils if necessary. Most of the time, the mare will dry the foal by licking it, but if it's chilly you can also dry the foal with a clean towel. Also keep in mind the 1-2-3 rule, Makloski says.

"In the first hour, the mare and foal should stand," she said. "In the second hour, the foal should be nursing. By the end of the third hour, the placenta should have passed. If the mare hasn't passed the placenta in the third hour, a veterinarian should be contacted."

The placenta might pass in pieces, but do not pull it-you might tear it accidentally, potentially causing an infection in the mare's uterus. If the placenta is in danger of getting stepped on, tie it onto itself with string until it has passed.

"A lot of people think you can pull the placenta out, like in cows, but you shouldn't do that," Stockstill said. "Once the mare has passed the placenta, look it over to make sure it's intact. If you're not sure what you're looking at, put it in a plastic bag and have your vet look at it." If the placenta is not intact, then it is important to

have a veterinarian assess the mare and her reproductive tract to determine if portions were retained. Placenta pieces are retained in the mare's uterus can lead to severe illness, including uterine infection, endotoxemia and laminitis. These can be life-threatening complications, Maklosi says. The umbilical cord often naturally detaches. If it doesn't,

foal's body. Disinfect the foal's umbilical stump with a Betadine solution, and continue to treat it for the next few days to prevent infection. "If the umbilical cord area is dirty, wipe it off prior to using the Betadine solution," Makloski said. "Any type of

you can clamp it off, but avoid clamping too close to the

iodine is useless if there is any type of organic material present." Makloski also says a half-and-half disinfecting solution of chlorhexidine and alcohol can be used twice daily on the umbilical stump. If swelling occurs, contact your veterinarian-that could indicate an umbilical abscess or patent urachus that requires immediate treatment.

must nurse within the first 12 hours to gain important nutrients and antibodies from the mare's colostrum and to gain strength. "I like to see the foal up and nursing very quickly because they don't have a lot of energy reserves in their body," Makloski

The foal should nurse within two to four hours after birth. It

said. "The amount of colostrum foals can absorb decreases

Meet the Parents



tobiano mare by Summerschicobandito and out of Dandys DS Trip Bar. "Dance" is owned and bred by Stockstill. Her sire, "Chico," excelled in roping and cattle events, collecting more than 1,000 APHA performance points, along with won two world championship titles in steer stopping, five Registers of Merit and Superiors in heading, heeling, tie-down roping and steer stopping. In 2010, Stockstill bred Dance to Wimpys

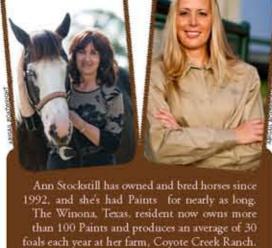
Shining Step, a 2005 palomino Quarter Horse stallion. Sired by National Reining Horse Association nearly \$3 Million Sire Wimpys Little Step (QH) and out of the Shining Spark daughter Shining Arrangement (QH), Wimpys Shining Step has earnings in NRHA competitions.

exponentially from the time they are born through 24–36 hours. If the mare leaked colostrum prior to foaling, it is possible

most of it has been lost or that only poor-quality colostrum remains—a mare's colostrum can be tested for quality, Makloski says. It might be necessary to provide a colostrum supplement or perform a plasma infusion to avoid a failure of passive transfer or low antibody absorption. Consider testing your foal's IgG levels—a measure of the antibodies absorbed from the colostrum-24 hours following birth. If IgG levels are adequate then further action may not be needed.

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Meet the Experts



Her tobiano stallions include APHA world and reserve world champions Summerschicobandito and Chicos Bandelero Chelsea Makloski, D.V.M., has been an equine veterinarian for five years. The Whitesboro, Texas resident grew up with horses and graduated from Oklahoma State University's veterinary program. Specializing in theriogenology, Makloski works at JEH Equine Reproductive Specialists in Whites-

boro. Texas, a clinic that uses the latest technol-

ogy to serve mares and stallions with reproductive

If IgG levels are borderline or low then intervention may be

warranted in the form of a plasma transfusion. Occasionally a maiden mare might reject her foal, Maklosksays. If the mare rejects the foal, she suggests setting up a foal box in the stall with the mare so it is protected but

injured, but allows the two horses to interact. Sedation might also be advised for an aggressive mare.

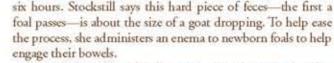
"You'll need to sedate the mare and secure her in a corner or safe place for the foal, and get the foal to nurse from that mare every two hours," Makloski said. "In this way, you can introduce the foal to the mare, get nourishment for the foal

Most mares eventually accept the foal, Makloski says. "A lot of times sedation, slow introduction and handling

still close by. This small plywood box—usually only four feet by six feet-separates the foal from the mare so he won't be

and still protect it."

might have more good tips if this problem occurs."



"I watch them like a hawk to make sure they pass that first poop," Stockstill said. "I would have your vet show you how to give an infant enema. Otherwise, have your vet do it for you." Bringing Home Baby

Make sure the foal passes its meconium plug within the first

If your mare has had appropriate vaccinations prior to foaling, then no vaccinations are necessary for the foal, Makloski says. If your facility and foal are in an "at risk" area for

your veterinarian for specific guidelines.

particular diseases, antibiotics might be suggested-talk to

The first week after your foal is born, you will probably keep the mare and foal confined together. Stockstill some-

times turns out foals of similar ages together with their dams. "If I have a bunch of babies, I'll put them back out to pasture all together," Stockstill said. "They'll be fine, and it's good socialization. But if I only have a few, I put them in a smaller pen where the herd can't get to running too much

Abigail Boatwright is a special contributor for the Paint Horse

Journal. To comment on this article, email feedback@apha.com.

And Now Meet Baby

After following Stockstill's mare for this series, the Paint Horse Journal is happy to introduce Wimpysshininggrace, a 2011 bay tobiano filly born

in late May.



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