



'A Window to the Womb'

For breeders, WhelpWise delivers peace of mind

BY DENISE FLAIM
The Ridgeback Register

It started with a goat. A very pregnant goat.

At least, that's what Airedale breeder and obstetrics nurse Karen Copley thought. A gift from a friend, Clementine the cloven hooper was aspiring to beachball proportions as Thanksgiving drew near.

But the vet Karen consulted came to a very different conclusion. "He didn't even examine her. He just said, 'She can't be pregnant because goats always come into heat in the fall and deliver in the spring.' And he charged me \$60 and sent me out."

Ignoring the vet's verdict, Clementine continued to balloon. So next, Karen visited a large-animal specialist. As they sat in the exam room, ultrasound machine at arm's reach, the vet flatly refused to turn it on, and repeated the same speech: According to the laws of seasonal estrus, her goat could not be pregnant. "And then he charged me \$120."

Frustrated, Karen snuck the goat into the hospital where she worked. As a top-level board meeting droned on next door, and as Clementine bleated her protests, Karen confirmed with ultrasound what she already knew to be true: Clementine was not only close to delivering – she was having quadruplets. And have them she did, inside a warm garage, because Karen's close monitoring of the contractions let her calculate when they would likely be born.

The goat episode was an epiphany for Karen, who had been in human obstetrics for two decades. "I knew all about this monitoring equipment made for preterm labor. All the

research was done on lambs and pigs before it was used for humans," she recalls. "I thought, 'Why are we not doing this for animals?'"

So, in 1997, Karen founded WhelpWise, a veterinary perinatal service that sells and leases uterine contraction monitors and ultrasound Dopplers to veterinarians and breeders. Based outside of Denver, the service monitored some 200 canine pregnancies that first year. Today, it does at least that many per month. Karen estimates that the service has monitored 14,000 bitches since its inception – and has never lost one in whelp.

On call 24 hours a day, seven days a week, the WhelpWise staff – which includes Karen, a veterinarian and a small army of vet techs and nurses -- interprets contraction and heart-rate data provided by the monitors and makes recommendations regarding veterinary intervention. Because the service advises on the use of labor-stimulating drugs such as oxytocin and calcium injections, it must be used under a veterinarian's supervision.

A little less than a week before the due date, the breeder activates the uterine contraction monitor twice a day for one hour, and the data is then transmitted over a phone line to WhelpWise. Following the instructions detailed in an accompanying video, the breeder also uses the Doppler ultrasound to locate fetal heartbeats – marking their positions on the bitch's shaved abdomen with a Sharpie! – and checking the heart rates at least once a day.

When labor begins, Whelpwise is able to compare both contraction and fetal heart rates with these baselines, and determine the presence or absence of labor as well as the puppies' well-being. The service's analysis of these critical values can reassure a breeder that all is proceeding according to nature's plan – or raise a red flag that problems might be developing.

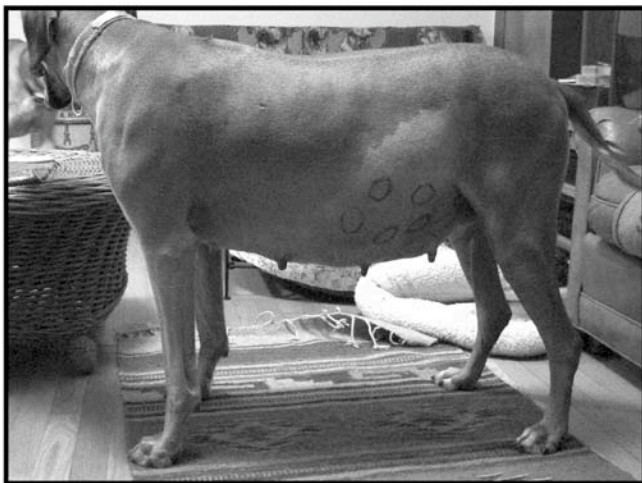
Cynthia Wilson of Pingora Ridgebacks in Durham, N.C., has used WhelpWise for four of her five litters, and wouldn't consider whelping without it.

"It's like a window to the womb," she says. "With those two pieces of equipment, you're able to know the status of the bitch and the puppies."

For many breeders, she adds, the service pays for itself by eliminating the need for pre- and post-labor X-rays to determine how many puppies are inside. It can avert an unneeded C-section. And, perhaps most important, it can save the life of a puppy – something that Cynthia says happened in two of her litters.



Rodeo models her uterine contraction monitor. The round unit by her nipples monitors contractions, and the information is stored in the recorder inside the fabric pouch on her shoulders.



Once fetal heart rates are located with the Doppler ultrasound unit, the puppies' locations can be marked on the bitch's shaved abdomen

In one, “we had a litter with just a few puppies,” she remembers. “My bitch delivered two normally and then went into secondary inertia.” The weakening contractions and the remaining puppy’s plummeting heart rate – 140 instead of the normal 170 – told Cynthia a C-section was needed immediately.

In the other litter, “after the tenth puppy, we thought we were done,” she says. Using the Doppler, she found another heartbeat. The bitch “was so wiped out that we had to give her drugs,” and the healthy puppy was born in due course – four hours after its littermates.

Cynthia’s experiences are typical of what Ridgeback breeders might encounter, Karen says. “Secondary uterine inertia is what we see most” in the breed, she notes. “Ridgebacks are generally good whelpers, and once you get them through the inertia, they usually finish the job.”

Karen understands the hesitation of some breeders to use powerful drugs such as oxytocin, which in large doses can literally shrink-wrap the uterus around unborn puppies, with disastrous results. By using the contraction monitor to measure the nuances of the uterine environment, WhelpWise can calculate micro-doses of the drug, and time them appropriately to avoid the potential of uterine rupture.

“Our goal with the medications is to return the bitch to the prior contraction pattern -- nothing more,” Karen stresses. “You never want to send them into what we call nuclear labor. It’s hard on mom, it’s hard on the babies, and it doesn’t get the job done any faster.”

Susan Morrill of Intrigue Ridgebacks in Burlington, N.C., used WhelpWise for her two litters, administering oxytocin in both. She values the “heightened awareness” that the service gave her, as well as the peace of mind. Her second litter comprised just two puppies, and “my big fear was that I would have to do a C-section” – a concern that turned out to be unfounded as the service helped her bring the 2-pounders into the light of day without any surgical intervention.

Using contraction patterns, WhelpWise can also “see” objects in the uterus that might be missed, even on an X-ray. “When the uterus is empty, there’s a lack of contractions,” Karen explains. Continued contractions along with the absence of heartbeats might very well indicate a retained placenta or mummifying puppy, and call for an oxytocin cleanout shot.

While many breeders turn to WhelpWise just before their puppies are ready to greet the world, some use it much earlier to ensure that their puppies stay around long enough to be whelped to begin with. Karen estimates that as many as 90 percent of bitches with unexplained infertility are reabsorbing due to premature labor, with subtle contractions that the WhelpWise uterine monitors, specially designed for premature labor, are sensitive enough to detect.

“The uterus is not supposed to contract during gestation -- especially when you have as short a gestation as the canine’s,” she explains. In dogs, embryos implant around day 18. “If the uterine muscle is tight, they can’t attach,” she explains. “If you get the uterus to relax, you’re going to get much better placental attachment and fetal growth.”

For those breeders who attribute infertility to bacterial infections, Karen notes that infections trigger the release of prostaglandins -- which in turn stimulate contractions.

To avert premature labor, WhelpWise begins monitoring at-risk bitches soon after breeding. (Cavalier King Charles spaniels in particular are prone to this problem.) If contractions are present, the service manages the administration

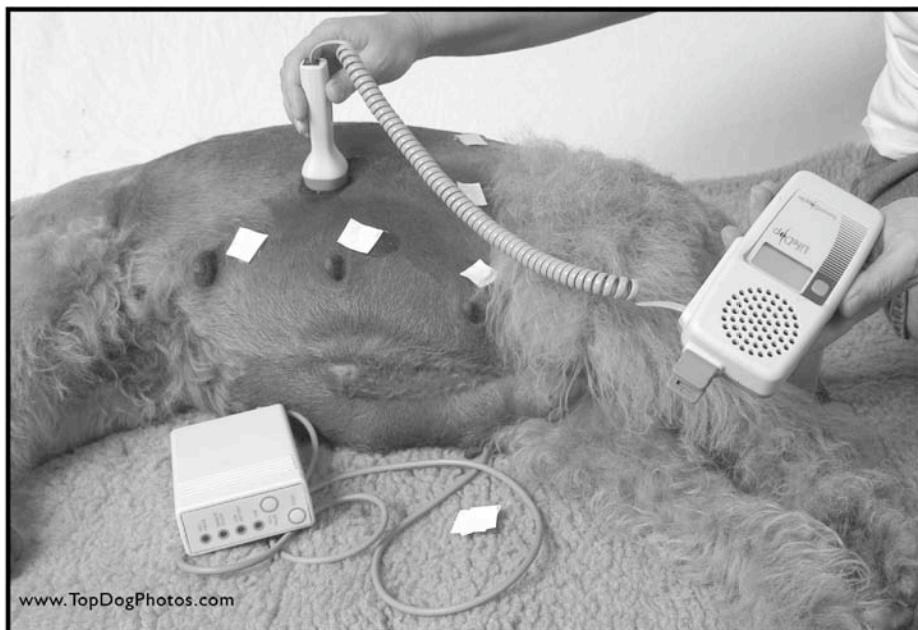
Fast Facts

Most common time for first puppy to whelp: 5 a.m. Yes, most whelpings take place during daylight hours, Karen says. It’s just the getting there that keeps most breeders up all night.

Percentage of times pre-whelping X-rays were incorrect: 80 percent. Most of radiographs underestimate the number of puppies present, Karen says. “You can’t get puppies to sit still for an X-ray, and it’s hard to shoot a moving target.” Even novice breeders who take the time to learn how to count hearts with the Doppler starting as early as day 35 are much more accurate, she contends.

Most difficult breed to whelp: Swiss mountain dogs. “They have the highest incidence of inertia, and if a veterinarian uses a gas anesthetic during a C-section, they will lose the puppies.” The reason for the neonates’ fatal reaction to gas inhalants is not known, and many vets have difficulty keeping bitches anesthetized using only injectibles such as Propofol until all the puppies are removed. Interestingly, Bernese mountain dogs, which are closely related to Swissies, do not share this problem.

Effect of a full moon on whelping: Regardless of the folklore, none. But Karen says bitches are in synch on some cosmic level. “They do indeed cycle with the universe,” she says, recalling one day when the service was simultaneously helping bitches whelp in New Zealand, Hawaii, Alaska, Colorado, Ohio and on the East Coast. “That’s something bigger than our local storm system.” ■



Monitoring the fetal heartbeat.

of labor-suppressing drugs used in human patients with premature labor. The drugs “need to be monitored very closely” because of potential side effects, Karen warns. But if breeders are compliant with monitoring contractions and administering medications, she can’t think of any WhelpWise litters that went on to be reabsorbed.

In addition to fixed WhelpWise units at veterinarians’ offices and guide-dog foundations, 37 are available for rental at any given time. To ensure availability, Karen recommends that breeders reserve equipment “the minute you breed,” then strongly suggests confirming pregnancy via ultrasound or another reliable method.

Whether or not they use her service, Karen has this advice for breeders: The biggest mistake you can make is to wait.

“Be prepared. Have an emergency plan,” she urges. “Know where the emergency clinics are, and call them to find out if there is a vet present 24 hours a day. You’d be amazed at how many are staffed by vet techs who decide whether or not to call the veterinarian.”

And if you are fortunate enough to have a vet who shares her private number, or will roll out of bed in the middle of the night to perform a C-section, appreciate it.

“That vet,” Karen concludes, “deserves flowers.” ■■■



WhelpWise Service
www.WhelpWise.com
 888-281-4867
 303-423-3429

Well Equipped

A recent discussion on the rr-folk email list yielded advice for whelping essentials (other than a pregnant bitch, that is). Here is an assortment of suggestions from some helpful Ridgeback breeders.

Whelping boxes

Jonart whelping box. Made of heavy-duty PVC and FDA-approved FRP Plastic panels with insulated raised base floor panels. Lightweight, washable, assembles with steel carriage bolts. Extra-large box (48 by 60 by 24 inches) is \$745. Attachable weaning pen available. www.thewhelpingbox.com.

Dura-Whelp box. Made of corrugated plastic. Lightweight, washable. Extra-large box (48 by 60 by 23 inches) is \$219.95 plus shipping. Attachable weaning pen available. www.xocom.com/fr/Boxes.htm.

Heat sources

Lovett’s Heated Whelping Nest. Bowl-shaped heat pad that maintains a constant surface temperature of 85 to 95 degrees. Made of easy-to-clean ABS plastic. 23 inches in diameter and approximately 1.25 inches deep. \$220. www.mightypets.com.

Therma-Whelp Puppy Warming System. Heat lamp is positioned above a warming cradle, which collects and redistributes heat. Ceramic heat emitter produces no light, allowing for more comfortable resting for bitch. Temperature is controlled by lamp height and position. \$149.95. www.xocom.com/fr/Warmer.htm.

Substrate

Wood pellets for wood-burning stoves. Use instead of newspaper or wood shavings to litter-train puppies. (Ferret owners have been using this as substrate instead of traditional cat litter for years.) Capsule-sized pellets are 100 percent natural and chemical- and resin-free. Disintegrate into sawdust when wet. Feces and urine clumps can be scooped, and puppies train readily to the pellets. Available from Agway and tractor supply, hardware, and fireplace retailers. Supply can be seasonal, and cost varies by region, from \$4 to \$10 for a 40-pound bag.