Shamrock was born in March 2007, second in a litter of eight. She was healthy and vigorous, a beautifully marked brindle and white. I didn't notice for a few hours that her hind legs were badly malformed. They actually appeared to have been "put on backwards." She pulled herself around much like the other puppies, but where they were able to push a little with their hind feet, she just used her front legs. When I talked to our vet, she said we'd take a look at her when we did dewclaws.

Two days later, Dr. K. shook her head and said, "She can break your heart now or break it worse later." We wanted to give Shamrock a chance. In the 48 hours since her birth, she had nursed well, was otherwise very healthy, and had a special little spark that's hard to define. You know it when you see it in a puppy. It says, "I want to I live!" So Dr. K. called the reproductive specialist at the vet school nearby. That vet, who was also a breeder, said to put Shamrock down, that she saw no hope. A friend talked to her vet. Another no.

Nancy Doucette, who owned the sire, was invaluable to us in the meantime. She scoured the web and found a site on bulldogs called

The Mysterious Anomaly of Inverted Hind Feet

-- reading that was the first time we really had any hope. She talked to her own vet who said we might try wrapping the legs to get them in place. We knew the mother would never stand for that. And Nancy called another breeder (Labs maybe?) who was less optimistic. We had a lot of ups and downs but we just could not give this baby up. She was too eager to live. As the days went on, we found another

site about kittens with this problem

. It was a vet site that recommended casting the legs, but with the veterinary advice we were getting, who would we find to put casts on her? And the kittens described were older. We didn't know whether casting a less-than-week-old puppy was even possible. We also found some references to "twisted leg syndrome," but nothing very helpful.

Finally I called Dr. Barbara Henderson, a whippet breeder who is also a vet. She said, " Give that puppy a chance! " That was all we needed to hear. She suggested range of motion exercises a few times a day, gently extending and contracting the legs. She told me there was a similar condition in horses called " windswept foals. " We've since learned this condition is seen in pigs, calves, and humans, as well, and there is even a National Geographic special on an elephant baby with the condition. It's obviously much more serious in animals who need to be on their feet to nurse. There was a You-Tube video going around recently of a foal with his front feet reversed. They went through a lot with that baby, but were

able, through the use of casts, to keep him on his feet and nursing long enough for the legs to correct themselves.

The condition Shamrock had is called congenital metatarsal hyperextension and it's caused by bad positioning in the uterus. It's most often seen in large litters The puppies are crowded and one of them gets a leg or legs twisted. If the pup stays in that position, the ligaments from the front stretch and the ones in back tighten so that after it's born, the puppy's leg is flipped around backwards and held there by the ligaments.

Progress with Shamrock seemed slow, but in retrospect, it really wasn't. She developed sores on her feet from dragging herself around, but we put a little Vaseline on them and they healed. Nancy called nearly every day, but every day, it seemed we had to report, "About the same."

At one point, Walt said, " You know, even if we have to amputate one leg, Shamrock could get along on three. " That was how determined we were, And very slowly, Shamrock grew better.

Within six weeks, she was perfectly normal. We took her to see Dr. Henderson at eight weeks, and she pronounced her completely normal. Though we were tempted to keep Shammie after all we had been through, we decided to let her go to a very special couple we'd talked to from New Jersey. They had recently lost a whippet and were in need of the kind of strength and hope Shamrock possessed in spades.

Her family brought Shamrock to our reunion last year and she was one of those that I wondered how I let get away! She is an absolutely beautiful little girl with flawless rear movement and no sign of deformity anywhere.

Above is a slide show depicting Shamrock's journey to a normal life. I hate to think how many of these puppies and kittens are euthanized because veterinarians are not familiar with this birth defect. We were lucky. We found a vet who believed in her and we started with a puppy who wanted to make it. We hope by sharing this that someone somewhere will decide to give another Shamrock a chance.

Note: Congenital metatarsal hyperextension is not the only cause of inverted hind feet. Although we did not have Shamrock x-rayed, we should have, in order to rule out other causes that might have had a sadder outcome. I've heard of one pup who exhibited the same symptoms because his patella was completely over on the outside of his leg. He had no patellar groove. At ten weeks, he had surgery: The vet created a groove and pinned the patella in place. This puppy would not have developed normally. If we had this to do over again, we would have done the same thing, but xrayed Shamrock at three or four weeks to make sure we knew what the problem was. However, having talked to many, many breeders who have encountered this problem, I do think in most cases, it is a simple ligament problem which will self-correct with some exercises.