

'Lower Back' Problems in Dogs: The Causes, Symptoms, Long-Term Effects & Treatment

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INTRODUCTION

The FLA Rendezvous 2002 was highly successful, and one of the reasons for its success was the enlightening and revolutionary presentation given by Robert H. Hathaway, D.V.M., on 'lower back' problems in dogs.

According to Dr. Hathaway, who is one of only three veterinarians in the country who practices what he calls chirovet-practic, the root of many health-related problems in dogs can be traced back to a subluxation (skeletal dislocation) of the sacrum—which is analogous to a lower back misalignment in humans. (See Figure 1 for a full view of the canine pelvic area.)

Not only did Dr. Hathaway explain that severe problems such as hip dysplasia can be caused by a subluxated sacrum, but he went a step further and explained how many other seemingly unrelated problems in dogs—and humans alike—can actually be caused by long-term lower back misalignments.

In this article, we will discuss the most common causes of a dislocated sacrum in dogs. We will then list the possible symptoms and long-term effects of such a dislocation. Finally, we will conclude with a discussion of Dr. Hathaway's cure for sacral subluxation and the numerous associated ailments.

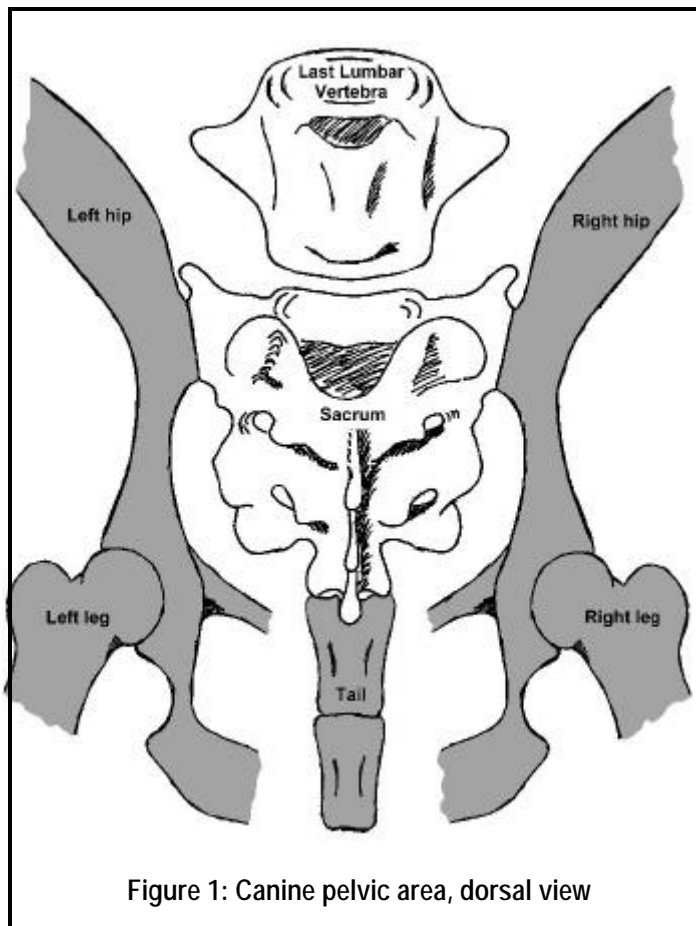


Figure 1: Canine pelvic area, dorsal view

CAUSES

A dog's sacrum 'floats' behind the last lumbar vertebra (Fig. 2) and pivots as it walks (Fig. 3). If the sacrum becomes pushed too far to either side of the pelvis, it can become locked into, or rather out of, place (Fig. 4). Once the sacrum is dislocated, there is nothing the dog can do that will relocate it.

A dog's sacrum can become dislocated in several ways. For example, pups born to a mother with a narrow pelvis are often forced through the birth canal by passing one hip and then the other. If the pressure is too great while the pup is passing through the birth canal, the pup's sacrum can be dislocated.

Another cause of a dislocated sacrum is a dog falling on a slippery surface, such as linoleum, cement, or a hardwood floor. This can happen when a dog is running, turns sharply, and its rear legs slide out to the side. The pressure of the fall is often enough to dislocate the sacrum.

A third less common way that the sacrum can be dislocated is when a veterinarian prepares a dog for abdominal surgery. When the dog is sedated and placed on the table, its front legs are tied above its head, and then each rear leg, in turn, is pulled down and to the side and tied. As a result of the anesthesia, all of the muscles in the dog's body are relaxed, and it takes very little pressure to dislocate the sacrum when securing a rear leg.

SYMPTOMS & LONG-TERM EFFECTS

The early symptoms of a dislocated sacrum are many (Table 1), and include pain, difficulty or refusal to run and jump, and appearing unhappy or withdrawn. Long-term effects are even more extensive (Table 1). In this section, we will explain just a few of the possible long-term effects of sacral subluxation in dogs (and wolves/wolfdogs as well).

Hip dysplasia: Dr. Hathaway states: "I have never seen a radiograph of hip dysplasia [in which] the sacrum was not subluxated. The nerves supplying the hip musculature are pinched, allowing the head of the femur to displace." In simple language, this means that the sacrum has locked out of place and has pinched one or more sacral nerves. These pinched nerves cease supplying neural impulses to the muscles in the hip. Once the hip muscles become relaxed, the ball of the hip can rotate out of place. Some of the typical signs of hip dysplasia are as follows:

- The dog refuses to jump;
- The dog drags its toes on one or both hind legs;
- The dog takes uneven or small steps with one or both hind legs;
- The dog bears weight unevenly on hind legs or shifts weight to front legs;
- The dog will not lift his leg or will squat unevenly to urinate or, in some instances, may become incontinent;

- Severe cases can result in paralysis of one or both hind legs and/or the tail, in which case, the muscles will become atrophied.

These are 'textbook' symptoms of hip dysplasia. However, a subluxated or misaligned sacrum can cause other problems as well. When the nerves supplying the hip muscles are pinched, the dog suffers pain, much like humans with a pinched sciatic nerve. The pain causes the brain to secrete hormones that activate the adrenal gland, and a constant supply of adrenaline is produced to deal with the pain. The thyroid will initially become hyperactive due to the constant secretion of adrenaline, but will eventually become hypothyroid once it has been exhausted. The constant release of adrenaline will also inhibit neural impulses and reduce blood supply throughout the body, resulting in such problems as a weakened immune system, skin allergies, digestive disorders and food allergies, reproductive disorders, and maladies associated with the mucous membranes.

Digestion: A poor blood supply and neural response to the pancreas can result in pancreatic insufficiency—which is the reduction of digestive enzyme production and the reduction (or cessation) of insulin production. When insufficient enzymes are produced to process food, the food can putrefy and ferment in the animal's stomach. Food allergies may result from the toxins created by this putrefaction. Foul breath is often noticed, and is caused by the gas produced from the fermented food. This excess gas can also trigger bloating.

Mucous membranes: The lack of a sufficient blood supply and neural response to the mucous membranes throughout the body causes them to be less moist. Drier membranes impede the ability of immunoglobulins to cross the membranes and alert the body of invading microbes that can cause disease.

Skin: Once the blood supply and neural impulses become inhibited in the skin, oil glands embedded in the skin cease functioning properly. The oil remaining in the glands becomes rancid,

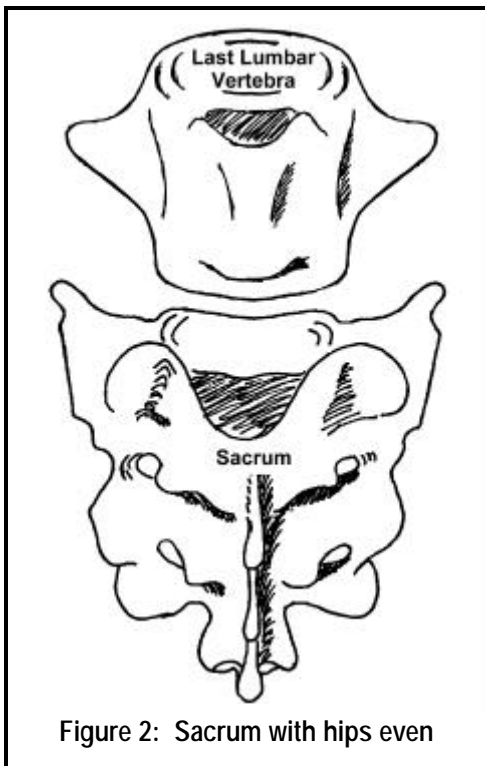


Figure 2: Sacrum with hips even

and the skin produces a foul odor. Hair will lose its luster, and the skin can become dry and flaky. Unhealthy skin is also more susceptible to external parasites and skin disorders such as hot spots.

Reproduction: Low sperm count in males and various reproductive problems in females can also be attributed to the inhibition of blood supply and neural impulses to

the testes, ovaries, and uterus as a result of pinched sacral nerves. Females may have constant uterine problems arising from the affected uterine mucous membrane. In intact females, litter size is reduced because the inhibited blood supply is not sufficient to supply nutrients for a large litter. In addition, the pup located the farthest from the blood supply often either dies and becomes resorbed or ends up being the runt of the litter.

TREATMENT

As mentioned above, sacral dislocations can happen in a variety of ways and can result in a variety of seemingly unrelated health problems. Unfortunately—but not surprisingly—the problems associated with the dislocation are typically addressed by treating the symptoms rather than the ultimate cause. As you know, treatments for such serious problems as hip dysplasia can be quite costly. However, if symptoms are 'fixed' without fixing the ultimate cause, and the same symptoms then continue to recur, not only is this a waste of money, but it is also not healthy for our canine companions.

Dr. Hathaway has developed a seemingly simple, yet highly specialized technique for detecting sacral subluxation and then relocating the sa-

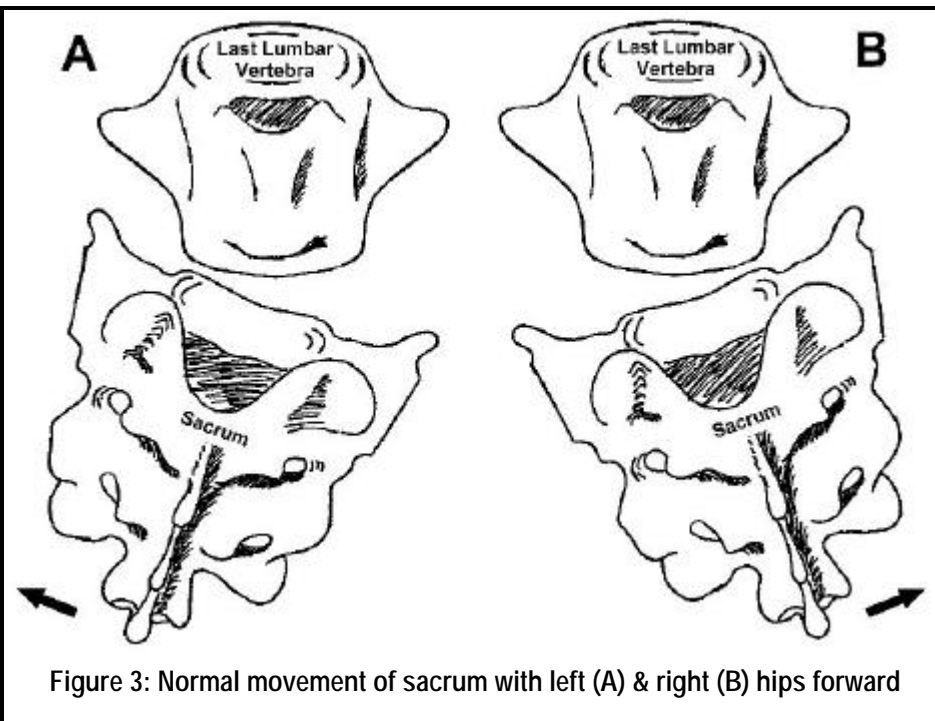


Figure 3: Normal movement of sacrum with left (A) & right (B) hips forward

crum. Once he does this, the nerves in the sacrum begin functioning again, and the plethora of problems and ailments that can result from long-term sacral dislocations are partially or completely alleviated.

In the following quote from his website (<http://www.chirovetpractic.com/history.htm>), Dr. Hathaway explains why he first became interested in chirovetpractic¹ in horses, and then relates the story of how he became involved in treating dogs:

What created my interest in chirovetpractic was the fact that I, like the other racetrack veterinarians, was experiencing great difficulty diagnosing rear leg lameness. I was only treating symptoms about 80% of the time. I was also doing a lot of head scratching. I now know I was treating the symptoms of subluxations (skeletal dislocations) in the lower back.

One day, while performing a neurological examination on a horse, the owner said, "She has difficulty going uphill, downhill, and jumping." What popped into my mind was, those are the symptoms of hip dysplasia in the dog. I completed my examination, realigning the third cervical vertebra, three lumbar vertebrae, the sacrum, the left hip, and the right tibia. Driving home, I began thinking about where I could get my hands on a dog to examine.

Over the next couple of months, I got my hands on every dog that I could. When I returned to check on the first dog that I had adjusted, I was greeted by the stable owner. He asked, "What in hell did you do to my dog?" When I could finally clear my throat by swallowing my heart, I asked in a weak voice what was wrong. He said, "She's 12 years old and running around, acting like a puppy again." Then he smiled, knowing that he had scared the hell out of me.

During his presentation at this year's FLA Rendezvous, Dr. Hathaway performed a sacral realignment on an FLA member's dog that was having serious difficulties walking and running. This dog was a previous patient of Dr. Hathaway's and had been treated for the same problem six months earlier, and was, therefore, due for another adjustment. The next day, several of us visited the member's house in Ocala and saw the dog running around the

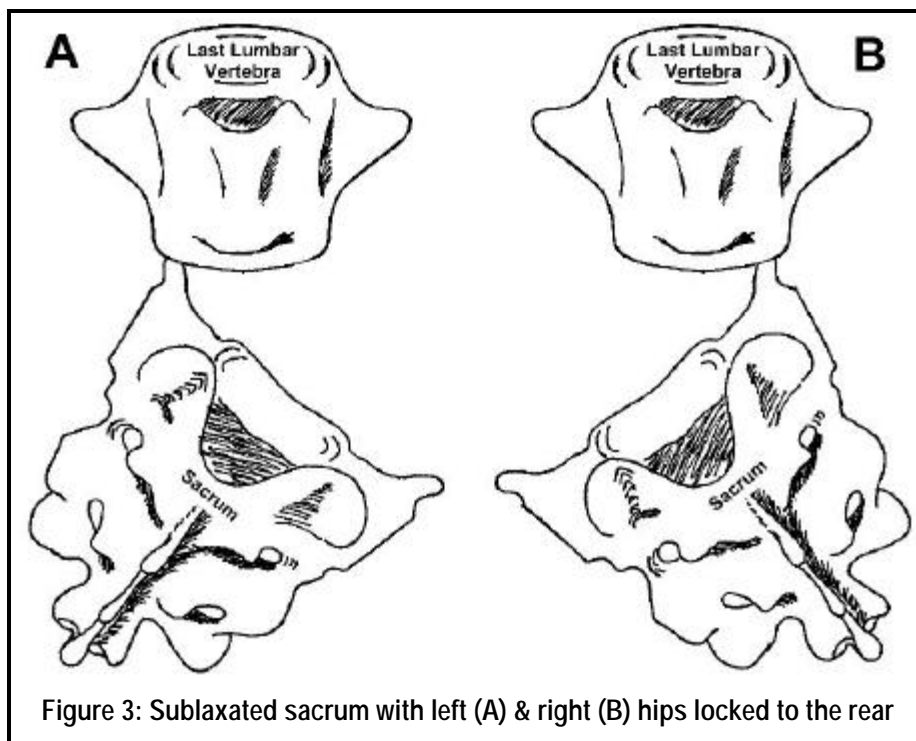


Figure 3: Subluxated sacrum with left (A) & right (B) hips locked to the rear

yard with much greater ease.

Although the procedure may have appeared simple to us, it is important to note that the ability to detect a sacral subluxation and to properly treat it is not at all simple. In fact, Dr. Hathaway explained that it took him two years of hands-on training each and every day to be able to accurately diagnose a dislocated sacrum in horses. But once he was able to do it in horses, he was also able to perform the diagnosis and treatment on dogs...as well as numerous other animals.

Dr. Hathaway has adjusted over 1,000 horses, 1,000 dogs, 40-50 cats, three mules, two wolves, several llamas, and a camel. In dogs, he estimates that he is 98+% successful in relieving hip dysplasia, disc problems, dry skin, foul breath, inability to jump up or jump well, paralysis of one or both rear legs, lameness, small litter sizes, and other symptoms. It is important to note here that the quicker the subluxated sacrum is realigned, the faster the recovery will be. Long-term problems may be permanent or may recur. The sacral realignment will, however, bring about relief, especially if done annually or semiannually.

We mentioned at the beginning of this article that Dr. Robert Hathaway is one of only three veterinarians in the country who specializes in chirovetpractic, and the only one in Florida. Dr.

Hathaway currently lives and practices in Ocala, but he is willing to make house calls anywhere in the world. The normal price for an examination, diagnosis, and treatment of a sacral subluxation in dogs is \$350 per dog, but the price per animal decreases if additional animals are treated on the same house call. If you would like to contact Dr. Hathaway, we will provide his contact information.

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Hathaway, R. H., D.V.M. 2002. *Chirovetpractic* website. Available online:

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¹ The definition of chirovetpractic, as modified (by Dr. Hathaway) from Stedman's Medical Dictionary is as follows: "Chirovetpractic ... is a philosophic system of mechanical therapeutics that attributes disease in quadrupeds to vertebral subluxations; it treats disease with manipulation of the vertebra in order to relieve pressure on the nerves at the intervertebral foramina, so that the neural impulses may flow

Table 1. Symptoms of subluxated sacrum in dogs (modified: Hathaway, 2002).

Morphological symptoms:

- ◆ Roached, weak, or sore back
- ◆ Head held lower than normal—lifting the head causes the nerves to be pinched harder in the sacral area; most people believe this is a cervical (neck) problem
- ◆ Cow hocked
- ◆ Tail dead—some dogs kick the tail with their hocks
- ◆ Tail crooked or off center
- ◆ Hip dysplasia—the nerves supplying the hip musculature are pinched, allowing the head of the femur to displace
- ◆ Partial paralysis of one or both rear legs
- ◆ Elbow problems—weight is thrown forward, using the front legs as crutches, and the elbows become hyperextended; in time, the elbows will turn out and the paws in, like a bulldog
- ◆ Panosteitis—the dog throws its weight forward and uses the front legs as crutches, causing inflammation of the bones, periosteum, and marrow
- ◆ Muscle atrophy in the rear legs—caused by a lack of neural impulse, blood supply and paralysis
- ◆ Spondylosis—caused by the spine being forced to bend laterally (side to side) every other step
- ◆ Disc problems—same cause as spondylosis

Neuromuscular/motor symptoms (movement):

- ◆ Difficulty stacking—pulls rear leg in and/or sits (show dog)
- ◆ Pacing—both legs on one side go forward at the same time
- ◆ Tail wags poorly if at all
- ◆ Difficulty going up or down stairs
- ◆ Short-stepping with one or both rear legs
- ◆ Bearing weight unevenly on rear legs
- ◆ Dragging toes on one or both rear legs
- ◆ Not lifting leg to urinate—adult males only
- ◆ Squatting unevenly while urinating

Diseases and disorders:

- ◆ Dry itchy skin and associated diseases—adrenaline reduces the blood supply to the skin, which stops the oil glands from working, causing a dull coat as well
- ◆ Foul breath—pain causes the continual secretion of adrenaline, which greatly reduces the neural impulse and blood supply to the skin, mucous membranes, reproductive system, and digestive system; food begins to putrefy and ferment in the intestines, causing the foul breath
- ◆ Food allergies—food putrefaction causes this
- ◆ Bloat—food fermentation produces the gas that causes bloating

- ◆ Foul skin odor—once the oil glands stop working, the oil left in the glands becomes rancid
- ◆ Hot spots—on the rear legs of a dog, a continually slightly pinched nerve causes a continual itch to occur; even though the neuron is pinched within at the sacrum, the brain perceives the itch to be at the nerve endings
- ◆ Hyperthyroid—caused by continual secretion of adrenaline
- ◆ Hypothyroid—the continual secretion of adrenaline eventually exhausts the thyroid gland
- ◆ Pancreatic insufficiency—the continual secretion of adrenaline reduces the neural impulse and blood supply to the pancreas, causing a reduction in digestive enzyme production, and a reduction or complete cessation of insulin production, leading to sugar diabetes
- ◆ Sugar diabetes—see pancreatic insufficiency
- ◆ Addison's disease (hypoadrenocorticism)—continual secretion of adrenaline eventually exhausts the adrenal cortex
- ◆ Reproductive problems—due to pain, paralysis, and the lack of neural impulse and blood supply to the reproductive system
 - ◇ Some males refuse to mount a female due to pain and/or paralysis
 - ◇ Some females have difficulty bearing the weight of the male due to pain and/or paralysis
 - ◇ Low sperm count
 - ◇ Cycling problems in the female
 - ◇ Some of the embryos that implant into the wall of the uterus will resorb
 - ◇ Some of the fetuses will die and resorb or mummify
 - ◇ Last pup in line for nutrients from the mother's blood (*i.e.*, last one born) will most likely be a runt
 - ◇ Failure to carry pups to term
- ◆ Weak immune system—adrenaline suppresses the immune system
- ◆ Neural myelatrophy—caused by a lack of neural impulse and blood supply
- ◆ Degenerative disease ("old dog syndrome")—caused by the degeneration of muscles and organs, and the buildup of toxins in the body due to putrefaction of food in the intestinal track

Behavioral symptoms:

- ◆ Resists or refuses to jump
- ◆ Prefers to sit on one side of the rear end
- ◆ Incontinence—due to pain, the dog will not voluntarily urinate or defecate
- ◆ Guilty look—this is how a dog expresses pain
- ◆ Hyper or restless for no apparent reason
- ◆ Acting oddly when no other problems are evident
- ◆ Unhappy and/or withdrawn

PERSONAL HISTORY OF DR. HATHAWAY

1940 - I was born in Columbia, SC. My father was a jockey, owner and trainer of racehorses. A typical year would find us in Louisville, KY, in the spring at Churchill Downs racetrack. The summer would be spent in NY, OH, or IL. The fall would find us in Lexington, KY, and the winters in Miami, FL, or New Orleans, LA.

1952 - I began working at racetracks in the summer as a hot walker and was soon taught to groom horses. Dad was a good horseman and a harsh teacher. During my freshman year of high school, I went to seven different schools, two of them twice. At the beginning of my sophomore year, Bloom Township High School in Chicago Heights, IL, refused to let me take courses that I wanted to take. I wanted to become a veterinarian. They claimed those courses were for permanent students, and that I was a transient. I quit school and took a job as a groom on the racetrack. I thought that my dream of becoming a veterinarian was lost forever.

1957 - I stepped outside of a stall I had just bedded down and lit up a cigarette. The groom on my right did the same. I was 17. He was 67. The groom to my left was 70. I looked at them both and thought, we are all getting the same pay. There is no future being a groom.

1958 - I joined the U.S. Navy in January. I became a radioman and worked for admirals for most of nine years. I attended Radioman B School, which gave me the math background I had missed in high school.

1963 - I was stationed in San Juan, PR, my last three years in the Navy. I received a GED high school diploma, and attended college at night those three years. I was honorably discharged from the Navy in December 1966 with a year of college, with mostly A's and a couple B's.

1967 - I went to work with my father who was dying of cancer. I applied to U.C. Davis, CA, for their pre-veterinary program, but they turned me down, stating that they would not accept the Florida State credits I had earned while in Puerto Rico. The University of Minnesota accepted my credits. My counselor advised me that I was on probation because I had not attended high school to receive my diploma. I asked him what probation meant, and he said, "You have to maintain a C average or you will be dropped from the University." I laughed. He asked, "What's so funny?" I replied, "Hell, we're all on probation." He thought for a moment and said, "You're right. I never thought of it that way." In hindsight, being accepted by the University of Minnesota was the best thing that could have happened to me. I got a much better education for practicing veterinary medicine than I would have received at U.C. Davis. There were students who failed to get into my class at the College of Veterinary

Medicine who were accepted into the College of Medicine at the University of Minnesota—the college that produced the doctors who created the Mayo Clinic.

1974 - I graduated from the U.S. Army.

1978 - I began my racetrack practice in southern California at Hollywood Park, Santa Anita, and Del Mar racetracks. I had been working over a 100 hours a week for a year and a half before my wife took my son and left. I was crying on the shoulder of one of my veterinary friends when he asked, "How long were you married?" I replied, "Six years." He said, "You'll be getting a divorce about every five or six years as a racetrack veterinarian." I questioned a couple other vets and they said the same thing. I decided then that I wanted to do something else for a living.

1984 - I dropped out and sailed the Bahamas as the navigator, ship's doctor, assistant cook, head cleaner and chief anchor yanker. It was a wonderful time. The Bahamian waters are the most beautiful I have ever seen. The people, although mostly poor, were friendly. We just had to stay away from the guys that wore heavy gold chains around their necks—the drug runners. I studied philosophy, psychology, the world religions, self-help, and metaphysics. I put on seminars on how to improve all relationships, business and personal. I wrote a couple of books that remain unpublished. Best of all, I learned a lot about myself.

1990 - I returned to the racetracks in southern California and met Gerald Knight, the man who taught me how to diagnose and adjust horses.

1991 - I moved to the San Francisco Bay area to begin my Chirovetpractic Practice. During the next nine years, I learned the symptoms seen in horses, dogs, and cats. This allowed me to create my website. I began getting more requests from Florida for work than I was getting in California. My practice had moved before I had. I tried many different things to be able to stay in California (my lady did not want to move to Florida). Whatever I tried to improve my business in California failed. The doors were closing in California and opening in Florida. I was torn. My business sense was saying, "Move to Ocala, Florida." My heart was saying, "No! No! No!" I finally took a meditative walk. The first thought that came to my mind was, "You don't trust God, do you?" That question took me aback, and I said, "All right; I'll trust."

2000 - I moved to Ocala, Florida. After speaking to the Florida Farm Managers Association, I had an instant practice. Business has been good ever since, and it is still growing.