

## **A simple beginning to understanding of Dogs in Dog Sports and their Growth Plates**

I have been riding, training, and competing in Equestrian sports since I was 7 years old and grew up on a barrel racing horse farm, besides training dog as a little girl and every animal I could find. My dog training started with my first Border Collie, Cody, over 18 years ago. I started Obedience and Frisbee disc over 18 years ago and apprenticed under a dog trainer for 2 full years, she competed in competition obedience. Competition obedience was never a main interest to me, but it was a great learning experience. My horse sports competition and training made it easy to transition to dog sports and for western pleasure and barrel racing we did ground work until the horse was 2 years old and prepared the horse for the rider, but waited to actually ride and place weight on the horse until they were 2 years old. So, ground work kept us busy for 2 years. Growing up on a farm we had every animal known to man kind besides my dad was an excellent horse trainer for halter, western pleasure, barrel racing, reigning, trail riding, and did mounted sheriff riding and horse training. So, he set some guidelines down for us kids growing up on a farm. We were not able to go out the barn by ourselves until we were 7 yrs and knowledgeable animals and their behavior. I also received my very own already trained pony when I was 7 years old for barrel racing and other competition, so I learned from my experienced pony. Then at 10 yrs we started training other people's ponies with my dad's help, and at 13 yrs I received my own competition horse (western pleasure, barrel racing, reigning, trail riding, and halter class) to train from scratch. Learning on an experienced pony and watching my day for years made it easy to train our own horse, now we were the experience one. These are good rules of thumb that can be transferred to dogs and dog sports.

Dog sports came easy to me and was fun training; however, in the sport the Frisbee Dog sport was missing two big elements from my horse competition experience. One was the lack of professional dog trainers to help guide the sport and the second was the lack of knowledge of physically peaking a dog for dog sports and a concern for the dog's health during their growing stage.

At best, I wish that Frisbee Dog handlers would seek out a professional dog trainer to get the basics down (ground work). Then we would not have to worry about people competing their dogs too young, because they would be worried about the basic dog training skills first, as well as, pressure from the dog trainer to wait on competitive sports until your dog is physically and mentally developed and had the fundamentals of prey drive, patience, focused play, retrieval, basic takes, passing takes, and basic jumping skills (which all can be done from the dog's nose height to the chest height in 2 or 3 weeks intervals once the dog is 6 months old in a 3-5 minutes session) and basic handler control and understanding of dog behavior. Remember, that it is not quantity, but quality if you lay the correct foundation. Once the foundation is there, the physical and mental developments are there, and the ground work has been laid then training is easy for you and your dog. One more thing that people tend to forget is the Prey Drive (Predatorily instincts that our dogs have) and they literally will do anything to get their prey (Frisbee disc). **The stronger the Prey Drive a dog has the slower I go in training.** You are only trying to pattern the dog's mind and teach them good motor muscle memory skills. Herding and working dog breeds pattern very quickly, some as quickly as 1-5 times.

The Frisbee Dog Sport is fun and easy for anyone. Sometimes that is our downfall, because many beginners only teach their the how to fetch (without even learning how to correctly throw a Frisbee disc) and we all know that Frisbee discs fly (should float up and forward) but in Toss & Fetch and Freestyle it takes much more foundation work to really have a reliable Frisbee Dog. Sometimes people ask too much (even push) their young dogs and forget that Frisbee disc (or any sport for that matter) should be fun for you and your dog, too. One of my sayings is that **horses have hard hoofs** for hundreds of miles of pounding and running (heavy - short condensed pasterns – ankles and metatarsus bones) that can handle the pounding and pounding of their heavy bodies for hundreds of miles for grazing and staying alive. Where as, **dogs have soft pads** for sprinting, and pacing on softer ground and nails to dig into the ground for cutting

and turning and to grab prey with smaller territories to watch over.. Most importantly, remember that **dogs (predators/sprinters)** are meant to be sprinters to catch prey and **horses (herds prey animals – to flee predatorily animals)** are sprinting for their life with extra endurance.

In ready in my Veterinarian Anatomy book that the dog has something like over 200 growth plates. Every bone in the body has a growth plates even the small sesamoid bones have a growth plate. I will have to look up the exact number of growth plates, but I will give you what I have found at a glance.

## The hindlimb of the carnivores

### Dogs

#### Development and Maturation of the Hindlimb Skeleton:

This is **only** for one hindlimb (one rear leg). Now multiple that by four limbs and the entire skeleton and imagine how many bones a dog has. You can do the math on the number of growth plates on just one dogs entire body.

These were found on the average size dog in America which is a 40-50 lbs dog. Remember, that back when this book was written dogs were heavier bodies carried more fat.

This does not included larger breeds and giant breeds.

The low number is for the smaller breeds and the larger number is for the larger breeds.

The smaller the growth plate the faster is closes, also the large the bone and growth plate the slower is closes.

These are approximate Plate Closures Observed on Radiographs in this veterinary manual.

Os coxae (hip bone)	Dog's Age
Ilium	4-6 months
Ischium	4-6 months
Pubis	4-6 months
Iliac crest	15 months to 5.5 yrs
Ischial tuber, caudal border of ischium	8-14 months
Caudal pelvic symphysis, interischadic bone	15 to 14 months
Pelvic symphysis closure (cranial to caudal)	2.5 to 6 years
Femur	
Lesser trochanter	8-13 months
Greater trochanter	6-9 months
Head	6-9 months
Diaphysis	
Distal epiphysis	6-12 months
Trochlea	3 months
Patella	
Tibia	
Tibial tuberosity	8-10 months
Proximal epiphysis	6-15 months
Diaphysis	
Distal epiphysis	5-11 months
Medial malleolus	4-5 months
Fibula	
Prox. Epiphysis	6-12 months
Diaphysis	
Distal epiphysis	5-13 months
Sesamoids	
Gastrocnemius	3 months

Popliteus	3 months
Tarsus	
Calcaneus	
Calcanean tuber	3-8 months
Diaphysis	
Metatarsus	
Diaphysis	
Distal epiphysis	5-7 months
Digit similar to forelimb	

This is just the beginning in understanding the growth and development of a dogs skeleton structure and growth plate development. I hope that this is helpful to everyone in the Frisbee Dog sport.

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