Info shared by Pitbull SA.

Manjaro APBT kennel.

South Africa.

My Website www.pitbullsa.co.za

My E mail "manjaro@pitbullsa.co.za"

My Facebook "Gawie Manjaro"

My Facebook page "Manjaro Kennel"

My mobile +27827838280.

Zello.com "VoIP" – ask for info.

Inbreeding.

Inbreeding is usually defined as the mating of closely related individuals from the same family.
Some references include half-brother to half-sister mating as well as brother to sister, father to daughter, mother to son, grandsire to granddaughter and granddame to grandson breeding's as examples of inbreeding.
Other references define 'closely related' as brother to sister or closer.
Another way to think of inbreeding is mating the individual dog to a dog that is "in" the dog's pedigree.

The goal of inbreeding - regardless of how you define it is to fix and preserve the traits that the breeder is looking for by increasing homozygosity in the dog's genetic pool.
You can calculate the inbreeding coefficient, or the probability of the genes being homozygous by looking at the number of times that a certain dog is present in the dog's pedigree.

In every generation, each parent transmits only one half of his or her genes, and each subsequent generation again reduces the genes from an individual in half:
In other words, 50 % in the first generation, 25 % in the second generation, 12.5 % in the third and 6.25 % in the fourth.
When the same ancestor appears in the pedigree of both the sire and dam, it increases the probability that the same genes will be present in the offspring and that they will be homozygous.

From breed to breed and bloodline to bloodline the popularity of inbreeding can and do vary.

The more sound the bloodline (void of structural faults and health problems) the more successful inbreeding will be.
This is because, inbreeding leads to random fixation of traits, increases homozygosity of the genes....

Note! >> Some genes, can cause inbreeding depression.
Some genes causing detrimental health effects are only expressed in the homozygous state.
They remain hidden (recessive) until as a consequence of inbreeding the genes are made homozygous.
You then see the trait expressed in the offspring – this is when you know.

One example of this is the gene causing juvenile cataracts in the Boston terrier. When mating two dogs that are heterozygous or carriers for the gene together the probability is 25% of the bad genes becoming homozygous and causing blindness in the affected offspring.
In the heterozygous or carrier state, the breeding dogs are unaffected and will have good vision.
A breeder could be totally unaware of a dog being a carrier for this gene unless a thorough pedigree analysis was done for this trait, or more easily detected when the dog produces affected pups.

Within a breed, it is not uncommon to see a breeder use half-brother to half-sister breeding's with great success for about four generations, and then run into a brick wall where they find that a bad trait that was occasionally seen is now being expressed 100% of the time in the offspring.
This is because of the fixing of the trait within the family because of the resulting homozygosity of the genes.

Knowledgeable dog breeders can use inbreeding as an effective tool to achieve specific goals and to enhance desired traits, if they are fully alert for developing problems.
Many novice breeders wrongly feel that inbreeding is the only way to develop their own strain or bloodline.
In the wrong hands or by ignorance - inbreeding can be dangerous.
If the novice starts with a fair or poor quality dog then begins to inbreed to one of the close relatives they are likely to run into trouble.

If one plan to use inbreeding in their breeding program, the breeder must have high quality, sound brood stock and a knowledge of what was behind them.
Before deciding to use inbreeding in your breeding plan there are some questions that a breeder might consider:
1 How inbred is the brood bitch or stud dog itself?

2 Are there any recessive hereditary disorders known in your stud dog or brood bitch's bloodline?
3 What breed faults might you be concentrating or passing on to the resulting offspring?
4 What are the positive effects that you are hoping to achieve by inbreeding?

Careful inbreeding is often of great value to a breeder.
It is most successful when the highest quality dogs are used as brood stock;
The breeder has a thorough knowledge of the dog's pedigree and intends to fix within the bloodline specific desirable traits.