

DOMESTIC X SERVAL AND CARACAL HYBRIDS

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DOMESTIC X SERVAL HYBRIDS

Serval males raised with domestic females will mate them, though the pregnancy is not always successful and human intervention may be necessary to raise the hybrid "Savannah" kittens. The F1 females are fertile, but the male hybrids of the first three or four generations are infertile (with one or two exceptions) and cannot be used to breed further Savannahs. The serval has three colour forms: melanistic, brown (usual) and white. Savannah breeders are mimicking white servals by introducing the silver gene into the Savannah breed. Black Savannahs are produced by crossing servals with melanistic Bengals. In nature, the cat and the serval don't even recognise each other as potential breeding partners. The likelihood of serval hybrids in the wild is therefore extremely remote.

The first documented serval/domestic hybrid was reported by Suzi Wood in the Long Island Ocelot Club (LIOC) Newsletter, Vol 30 Number 6, Page 15, Nov/Dec 1986. This reported the birth of an 8 oz female hybrid on April 7th 1986. The kitten, named Savannah, was born to a Seal Point Siamese cat and sired by a 30-35 lb serval called "Ernie" in Pennsylvania. Her weight from birth through to placement was comparable to that of an average serval cub of the same timespan. Her rapid growth and weight gain then tapered off, but she remained consistently larger than a domestic kitten of the same age and was 10 lbs at 6 months old.

Savannah's black spotting was an exact duplication of the serval's pattern, but the background colour was greyish-brown. This pattern included ocelli (pale silver spots on the backs of the ears). She had prominent ears, long legs, a "rangy" body conformation and a medium length tail. Like her domestic mother, she was vocal (described as a "talker"), an athletic climber and used the litter tray properly. From the serval side of her ancestry she became an "accomplished hisser and slapper", got her basic body conformation, coat pattern, facial expressions, body language and wariness of strangers. She also preferred a raw meat diet over domestic food. The interaction of domestic/serval ancestry produced her voice type, head shape, medium length tail and an assertive temperament. She was reportedly very affectionate, but disliked any form of restraint.

Suzi Wood wrote, *"While it has been rumoured that this type of hybrid was bred some years ago, to date research efforts in Europe as well as here in the US have not been able to document the case. For practical purposes, this kitten is considered a first of its kind. Without comparison model or a standard available, at eight weeks of age the infant's hearing, sight reflexes and coordination were tested. All functions were excellent, as compared to general feline skills."* Wood also noted no adverse reactions to the cat flu vaccination. Wood finished the report by stating "This hybrid combination will be known as the Savannah."

The LIOC Newsletter, Vol 33, Number 4, July/Aug 1989 (cover and page 4), carried a cover photo of Savannah (the name of the hybrid female) owned by Suzi and Mike Mutascio. The caption stated that the hybrids were called Savannah cats, in the same way that Geoffroy's/Domestic hybrids are called Safari cats and added that Savannah, the original hybrid, had borne kittens. Savannah, by then 15 lbs and owned by Suzi Mutascio, successfully pair-bonded with a 13 lb champion male Turkish Angora called Albert II, owned by Lori Buchko of Hightstown, New Jersey. Savannah produced 2 large kittens on April 5th, 1989; these being 25% serval ancestry. Prior to her 2nd birthday, Savannah had rebuffed 3 different potential mates for unknown reasons, but was oestrus cycling regularly.

The breeders were not worried about Albert's colouration as they claimed he had proven not to throw white dominant genes. This is a misunderstanding - white is dominant (actually epistatic), but Albert was evidently heterozygous and luck of the draw had resulted in no previous white offspring. Albert also carried red (masked by his dominant white gene), which hybrid breeders at that time considered desirable. Albert's long coat was recessive and also not considered a cause for concern, though a long coat might show up in later generations as a result of carried recessives. Albert's conformation complimented that of the serval - refined "boxed" head, narrow muzzle, copper eyes, large ears and rangy, leggy body. He also had a very good temperament. Albert joined Savannah in her own home and they had bonded within 2 days.

On April 5th 1989, Savannah's 3rd birthday, she produced 2 live kittens and a stillborn kitten. She

was an excellent mother. One kitten was a solid white male (proving that Albert did throw the dominant white gene!), the second was a spotted female with mottled areas of red (i.e. a spotted torbie) and the stillbirth was a perfect spotted male with a beige ground colour. All three weighed over 6 oz at birth 11 oz (female) and 11.5 oz (male) at 10 days. Though unspotted, the white kitten had a serval-type body.

The most obvious problem in serval/domestic hybrids is size difference. Typical domestic cats weigh between 8 - 14 lbs with a few reaching 20 lbs. Servals are in the 30 - 40 lb range although the race known as the "Servaline" is smaller as well as being paler, usually with smaller spots.

Unless he has been raised alongside domestic cats, it is not easy to persuade a male serval to mate with a domestic female since the smells and cues are wrong. If is willing, he must then work out how to get things in the right place with a much smaller female! It is possible to mate a domestic male with a serval female if the female is co-operative though domestic females are used by most, if not all, Savannah breeders.



Savannah photographs provided by:

<http://photos.yahoo.com/jewelsofthenilesavannahcats> & <http://www.junglecats.com>

If mating is successful, there is a problem with gestation period. A domestic cat pregnancy is (on average) 63 days. A serval pregnancy is (on average) 74 days i.e. 10 days longer. The hybrid kittens are larger than pure domestic kittens and the domestic female often goes into labour at her normal time - 10 days premature in serval terms. The more "overdue" she can made to be, the better chance the kittens have of surviving. If a serval female is bearing the young, the hybrid kittens are much smaller than serval kittens and she may kill them accidentally or her maternal instinct may fail to recognise them as kittens allowing her predatory instincts to take over. A domestic cat foster mother may be needed. Premature or undersized newborn kittens cannot suckle properly. They will weigh only a couple of ounces and are extremely fragile. They must be bottle fed every two hours, round the clock for the first two weeks of their lives, and then every four hours until they are weaned onto solids. Some must be tube fed or dropper fed until they are able to suckle from a bottle. By the time they are strong enough to suckle from the mother, her milk will have dried up. Other Savannah breeders have reported that they have experienced none of these problems and that all kittens have been born on time and raised by their natural mother so these issues are by no means universal.

At the end of all this, only the F1 females are fertile. The male kittens of the first three or four generations are infertile (with one or two exceptions); since they cannot be used to breed further Savannahs they are homed as pets. It is possible to backcross the hybrids repeatedly to a pure-blooded domestic or pure-blooded serval to get a fertile F1 hybrid male; it is fertile because it is either more than 90% serval or more than 90% domestic. The servals used are all captive bred (servals are bred for the exotic pet market); wild servals are not used.

An additional, and tragic, hazard is that the serval male may kill the female accidentally while gripping the female's neck during coitus. The potential problems make serval hybrids extremely unlikely in the wild.

The much hyped and overpriced Ashera announced in 2006 is a rehash of the existing Savannah breed (African serval/domestic hybrid). It appears to be a cross between male servals and female Bengals (Asian leopard cat hybrid). The males would be sterile, but the fertile females could be backcrossed to Bengals. Like the Savannah, it is a tall cat with leopardlike spots and contrasting tiger stripes and is claimed to weigh up to 30 lbs. The breeder, Simon Brodie, was previously involved

with Allerca's hypoallergenic cat. Brodie attempted to obtain Savannah females by deception, calling himself Campbell Francis and his firm as Monsenco Capital, however this did not succeed. He claims to have created the Ashera using artificial insemination (rarely successful in cats) and to have found the marker genes for size and pattern (claims that have not been published in peer-reviewed journals). Brodie's previous company, Allerca, claim to have found the genes to make cats hypoallergenic, but their work was not published in peer-reviewed journals.

Cats must be ordered in advance at a cost of upwards of \$22,000 with additional costs for hand delivery. Included in the deal are a 10 year consultation contract with an "internationally recognised animal behaviourist" and a 1 year guarantee. Neutering/spaying is mandatory - Brodie doesn't want anyone copying his cats, even if they are nearly identical to an existing breed. Just like the franchise-bred IRCA Ragdolls, they won't be eligible for showing either, because they don't come from a traditional cattery or breeding programme.

Buyers and would be breeder beware: having paid your money in advance, will you ever receive your kitten? Brodie's background of defaulting on loans, false accounting and unpaid employees suggests you'd be far better off buying from a Savannah breeder. He plans to franchise the breed, but was convicted of multiple cases of false accounting in the UK relating to another franchise scheme (Cloudhoppers) and has left dozens of unpaid bills in his wake. The Ashera could be a financial scam rather than a commercially viable breed (an Ashera dog breed is also planned!).

DOMESTIC X CARACAL HYBRIDS

In 1998, I Kusminych and A Pawlowa reported a caracal/domestic hybrid cat at Moscow Zoo ("Ein Bastard von Karakal Hauskatze im Moskauer Zoo" in Der Zoologische Garten Vol. 68, No. 4 (1998)). This article was printed only in German and I have no translated information. Though this sounds a surprising hybrid, domestic cats are crossed with Servals in captivity and the Serval and Caracal are interfertile. A zoo is an artificial environment which would have contributed to this unlikely mating.

The Savannah gives an indication of problems breeders would face should they choose to pursue a caracal hybrid breed. There has apparently been one attempt at a caracal x domestic hybrid; a male caracal was housed with a female Snowshoe, but the pair failed to mate (Nikki Matthens, Wild Talk). To regard a domestic cat as a mate, the caracal would have to be raised with domestic cats. The lack of interest in "Caracats" seems related to the current trend for breeding wild-looking striped and spotted cats; the caracal is more reminiscent of a large Abyssinian with long black ear tufts.

In 2007, domestic Abyssinian x caracal hybrids were apparently bred and termed Caracats. The F1 (first cross) hybrids are described as 25-30lbs, 12"-14" at the shoulder. The F2 generation (75% domestic) is described as 20-25 lbs and 10"-12" height. The hybrids have ticked fur with dark facial markings (moustache), tufted ears and some barred markings on the legs and belly. They are described as cougar-like apart for the ear tufts. The tail length is not stated (caracals have short tails). Caracal hybrids face the same problems as Serval hybrids regarding gestational mismatch: the domestic cat pregnancy is 63 days, the caracal pregnancy is 73 days therefore full term hybrid kittens borne by a domestic mother are premature in terms of a caracal. *The name "caracat", the use of Abyssinians, the reason for creating non-spotted hybrids and notes on pregnancy duplicates information previously published on Messybeast and on the Newbreedcats Yahoogroup (November 2003).*

The website detailing Caracat hybrids contained general misinformation and may therefore be unreliable. It incorrectly stated Chausies, Savannahs and Bengals used any domestic female that will tolerate a wild male (they used defined breeds) and that hybrid males are sterile for 5 generations (the F1 males are sterile according to Haldane's Rule, and the F2 to F4 generations may be infertile but this is not guaranteed).

MESSYBEAST SMALL CAT HYBRIDS

