

Woolly Monkeys



What is a Woolly Monkey?

The woolly monkey (*lagothrix lagothericha*) is one of the largest and most beautiful of the South American primates. They live in the middle and upper Amazon basin to the west of the rivers Negro and Tapajos. There are four recognised species of woolly monkey. These are mountain or long-haired woolly monkey (*lagothrix lagothericha lugens*), the brown woolly monkey (*lagothrix lagothericha poeppigii*), the grey woolly monkey (*lagothrix lagothericha cana*) and the brown-headed woolly monkey (*lagothrix lagothericha lagothericha*). These are by no means distinct and there is also some variation within each; two members of different species can breed, although the various types are found in different areas of the Amazon so in the wild this is unlikely to occur. Of the eight founder members of the Sanctuary, six were grey, one brown headed and one long-haired.

Woolly monkeys are arboreal (meaning tree-dwelling), spending most of their time high in the canopy of the trees and rarely venturing to the forest floor. They have evolved in a way which enables them to exploit this tree-top niche, to travel easily along narrow limbs, to reach nuts, seedpods and fruits at the end of branches, to leap between gaps safely and even to sleep securely 150 feet above the ground.

The most striking adaptation of a woolly monkey is the prehensile tail, which acts as a powerful fifth limb. It is easily capable of supporting the full weight of a monkey as it hangs from a branch, freeing the hands and feet for other uses, such as collecting food. Sometimes the monkey will use the tail as a hand, to pick up fruit or to carry leaves. The underneath of the end of the tail – about one third of its entire length – has a palm of bare skin which allows a firm grip. The tail also helps the monkey to balance as it moves, and is wrapped around branches as security against falling.



Woolly monkeys' hands are like human hands, though with small, unopposable thumbs. They have long fingers, tipped with curved fingernails, to hold and carry food. Their feet have opposable big toes so the monkey can grip branches above or below. The palms of their hands, feet and tail are also similar to those of human hands. The ridges of the fingerprints contain sweat glands to help the monkeys grip effectively. Their fingertips are very sensitive – useful for selecting fruit and leaves.

Woolly monkeys, like humans, have forward-facing eyes. This allows stereoscopic vision for judging depth and distance – important for leaps taken in the tree-tops. Primatologists have discovered that they are particularly sensitive to the colour green, enabling them to decipher many different shades in the green world of the forest.

The woolly monkey has a coat of short, dense hair, varying in colour from dark grey through to brown and sandy yellow. Each hair is striped with white, which reflects the colour of the monkeys' surrounding and acts as camouflage. The coat protects the monkey from the sun, rain and painful insect bites.

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Woolly Monkey Social Behaviour

Living in a social group is essential to a woolly monkey's wellbeing. Colony life provides the monkeys with security, friendship, emotional stability, safety and stimulation. It is only through being with other monkeys that an individual will be able to develop their identity and personality, and learn the skills it needs to survive. The monkeys are given daily opportunities to spend their time socialising with different members of the colony. This allows them to develop their own natural social bonds and behaviour, much of which is similar to that of their wild relatives.

The colony at the Sanctuary comprises three different family groups, all of whom are descended from three of the original females (Lulu, Jessy and Tina), and the males Jojo, Ricky, Django, Jimmy and Robin. Although male monkeys are unaware which individuals are their own offspring, female monkeys recognise their children and maintain close bonds with them all their life. This means that family groups are structured around the females, not the males. Families share similar physical characteristics and personality traits: for examples, the Jessy family is very sociable, playful and relaxed in human company, whereas the Tina family is slightly more reserved and the Lulu family loyal to one another and quite assertive. Above all, every monkey is an individual, and each one has an important role within their family and in the colony as a whole.



Adult male woolly monkeys

A colony may have several adult males, all of whom are generally assertive over the females. There is often a dominant male who leads the group. As he is responsible for the security and wellbeing of all of the monkeys and so he must be brave, strong, intelligent and fair. The most recent long-term dominant male was called Charlie. He maintained his position for eight years until his death in 1993. Since then, no single male has become dominant.

The dominant males will regularly test the security of the enclosures and fixtures by vigorously shaking the bars and will not allow other monkeys into new areas without first checking it themselves. In bad weather, when the other monkeys stay warm and dry inside, they will make occasional patrols of the territory to check that everything is safe.



Ensuring that colony life runs smoothly is an important role of the dominant male. He may ward off a dispute by appeasing the monkeys involved or by separating them. As a last resort, he will physically discipline the monkey he considers responsible, which he will do by shaking the monkey vigorously, always turning his head away to show that it is merely his duty and not an act of aggression (as making direct eye contact would be deemed as a direct challenge).

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The role of the adult and sub-adult males is to support each other in protecting the colony. The hierarchy amongst them may be fairly changeable. For example, one will occasionally form an allegiance with other males and use this as a way to challenge the authority of the more assertive males – although rarely will this escalate into a full-scale fight.

In the wild, when a female is on heat it is generally the dominant male who will mate with her and he will disapprove of other males getting too close, although it is possible for the female to mate with others when her heats are less strong. As a result of this, the adult males do not know which offspring are his own and so he treats all youngsters with great care; he will keep an eye on them, sometimes carrying infants on his back and occasionally indulging in a game. By proving himself to be a responsible and concerned guardian, the male will gain the respect and support of the females, which is a great boost to his social standing. A monkey can only become leader with the encouragement of the dominant females, who will actively support him in competition with the other males. A female will also support a particular male for more complex reasons: perhaps he is a close relation or perhaps his becoming leader will be beneficial to her own position in the hierarchy.

In recent years the Sanctuary has seen a shift in the male to female ratio in the monkey colony, as a result of a higher incidence of male births. Without the balance of males to females, and the fact that the remaining males are now mature and of similar ages, it is unlikely that any one of them will ever take on the role as group leader.

Adult female woollies and infants

Adult female woolly monkeys are smaller and less muscular than the males and lack their large canines and heavy jowls. The main role of an adult female is to look after her family. As a mother, she will provide everything for her baby – warmth, security, nourishment and protection. Females recognise their close relatives for the whole of their lives, making the maternal family unit the nucleus of the woolly monkey colony. An adult female may, therefore, be a daughter, a sister, an aunt and a mother. As her family grows, so will her prestige within the colony. An old female with many children and grandchildren is a highly respected and powerful member of the group and is extremely influential in choosing which male should be leader.



A mature female comes on heat every three weeks, with oestrus lasting about three to four days. The male is attracted to her scent and responds to sexual overtures of “teeth chattering” made by the females. A female woolly is not monogamous and will mate with a number of different males within the colony.

Woolly monkey pregnancy lasts seven months. Ideally, a monkey birth is a social occasion with other monkeys in attendance, from experienced mothers who help clean up to youngsters that watch and learn. Adult males are also good to have around to protect and comfort the mother and to prevent the youngsters from getting too close. One reason that woolly monkeys never bred successfully in zoos was because they would usually be kept in “breeding pairs” – an artificial situation which meant that if the female did become pregnant, she had no idea how to cope with giving birth or rearing children,

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something which in a natural colony situation she would have learnt from being in a family group.

From the moment of birth until about three months old, the baby remains clinging to its mother. The baby has very strong, flexible fingers and it hangs on with a tenacious grip so the mother can travel swiftly around the territory without fear of her infant falling. At first it will cling to the long hairs on her chest, then after a month or so it will usually move onto her back and begin to take an interest in the outside world. Soon the baby will start to reach out and touch things and climb off its mother to take a few tentative steps.

The youngsters suckle for about two years though will try solid food after about two months and after approximately a year or so suckling is mostly for emotional comfort. A baby monkey discovers what is good to eat by watching and imitating its mother. Usually, the first solid foods a baby tries are the little bits of fruit peel that its mother drops on its head! A mother will never consciously give food to her baby. This may appear harsh, but it is a good way to teach an infant independence – after all, being able to find your own dinner is a vital skill for a monkey to learn. Likewise, it is the baby who chooses when to climb down from its mother's back and when to return; a mother will neither pick up nor put down her infant.

For two years a mother is totally dedicated to her baby and she will not have another child until the previous one is no longer dependent on her.

Adolescent woolly monkeys



As the youngsters grow up, gender differences will become more apparent. Young females will often remain near their mothers and close family, while young males will spend more time with the adult males, often following the dominant male to see how to protect the territory and the colony. As a monkey grows up, it is integrated into the colony hierarchy with status depending on age, sex and personality.

The monkeys reach puberty between four and six years. Male monkeys grow large canines, develop heavy jowls under the lower jaw, and the skull broadens into a heart shape with the topsides slightly protruding. At puberty the female grows shaggy hair on her chest and stomach to which her babies will cling when they are born.

Woolly Monkey Communication

Sound is very important for woolly monkeys because they are often not able to see one another in the tree tops. This is why most of the monkeys' vocalisations are very high-pitched, as higher sounds carry further. Through their language they can warn each other of danger, tell each other that they have found some ripe fruit, or locate their family and friends. The monkeys also have language they use for communication one-on-one; these sounds are soft and gentle and are used for making friends with or reassuring other monkeys.

The monkeys communicate through posture, gesture and facial expressions as well as through their varied vocalisations. Each sound and posture also has many subtle variations and can mean slightly different things according to the mood, intention and situation of a particular individual at a particular

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time. Below are some examples of woolly speak...

Eeolk: This is a short high-pitched sound, which means "I'm here, where are you?" or simply "I'm alright" and can often be heard being repeated throughout the colony. If one monkey "eeolks", the others may all reply. Monkeys have distinct voices and are able to tell one another apart by their calls alone. "Eeolk" will also be used with more force to communicate over greater distance.

Trilling: This is a beautiful sound, very strong and continuous, like birdsong. It expresses extreme pleasure and happiness and usually involves the discovery of delicious food. An individual finding a tree full of ripe fruit would trill loudly to attract the rest of the colony.

Yook-yook-yook... this communicates possible danger and can take different forms. When one monkey is worried or upset it may "yook" quietly on its own, reassured by "eeolks" from the other members of the group. If there is a possibility of danger, the alarm call will be louder and will be taken up by the other monkeys. Females will often try to get close to a big male and younger monkeys will seek out their mothers. All the monkeys will adopt a high position for safety and the males will investigate and hopefully see off any danger.



Chuckling: When monkeys are playing together, you may hear them make a sound very similar to a human laughing quietly whilst shaking their heads from side to side. Young monkeys can be seen playing and chuckling together for hours at a time. The reason for this vocalisation is to show older members of the colony, and particularly watching mothers that their play-fighting is indeed just play and there is no cause for concern. Adults sometimes chuckle too, usually with a youngster rather than another adult, and it can mean that they are feeling slightly uncomfortable – similar to a person laughing when they feel nervous. Sometimes when monkeys chuckle together one of them will take the opportunity to re-assert their own position in the hierarchy or challenge that of another.

Screaming: most likely, when you hear a monkey screaming, it will be a youngster who has been told off by his mother or another adult, but sometimes you may hear monkeys of similar rank argue. This usually involves much ear-piercing screaming and aggressive body posturing. These disputes are not as fearful as they sound, as monkeys rarely get involved in real fights, and such quarrels usually end up with appeasement and making-up. They are, in fact, essential to the dynamics of a healthy hierarchical colony.

Ogh...Ogh...Ogh... This is a gentle croaking sound made by adult and adolescent males to infants. It expresses the desire to be friendly together with the fear of being rejected, and can often sound quite melancholy and plaintive.

Clucking: This sound is almost like a chicken clucking and is used to show that a monkey is getting increasingly annoyed. This noise can easily turn into a scream!

Cough bark: Sounding literally somewhere between a cough and a bark, this aggressive warning call is

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short sharp and repeated several times. It is made at the back of the throat with the mouth open and the teeth exposed, and is extremely dangerous as it contains elements of both fear and aggression. It is usually made by adult males and directed at a threat or intruder or sometimes, when fighting, towards each other. Often other members of the colony will make a similar, slightly higher but equally loud and continuous noise as encouragement.

Body language

Snuffling: This unique woolly monkey gesture is one of appeasement, friendship or greeting. The snuffle can be a quick gesture or a long drawn-out emotional greeting. For example, the adult males will often appease one another with a short snuffle or squeal. If there is a perceived outside threat, they show one another they have forgotten their differences for the time being, by covering the mouth and making a high-pitched squeak, which then allows them to concentrate on the threat and not worry about one another.



The long emotional snuffles that are enjoyed by two or more monkeys and involve curling up together, so they are as small, vulnerable and non-aggressive as possible and covering their mouths with one hand so as not to show bared teeth. They then make sobbing noises by blowing into their cheeks. Such behaviour can last for five to ten minutes and involve any number of monkeys in a huddle.

Grooming: Grooming is an important aspect of all monkey social behaviour. It helps to bond the family group together, with mothers cleaning their youngsters and the youngsters, in turn, learning to groom others as a result. It can also be an important way of showing other monkeys respect. For example, a dominant male or female will be groomed by those wishing to stay in favour. Thus grooming strengthens social ties, but most importantly it keeps the monkey clean and healthy. Usually the monkeys are simply removing mud or dirt from each others coats and enjoying the physical contact, but if they have a cut or scratch this will be groomed to keep away infection; an uncared for wound could be fatal in the humid Amazon. One thing they are not looking for is fleas or ticks – the monkeys are far too clean to have fleas!

The Cut-off: this is a commonly seen gesture in which a monkey will acknowledge the presence and position of another monkey by averting his eyes and turning his head away. For example, if a female wishes to pass close by an adult male, he will avert his eyes as a means of showing her she may pass without any problem. Similarly, if a monkey is being encouraged to join in a game that she does not want to be involved in, particularly if she feels the game will lead to a dispute where she may be dominated, she will very deliberately turn her back and head away from the other monkey to show her unwillingness.