

SOCIAL ORGANIZATION IN PRIMATES

CC-13

Few live solitary lives, most needing at least a mate among their own species. Many animals live in groups which may be temporary or permanent. Frequently grouping together requires some behavioural adaptation which ensures the cohesion of the group. This may require a complex of special behaviour patterns known as social behaviour. Social behaviour is well developed in insect.

Primates show marked socialization. The sociality of primates have been enhanced by the following attributes.

- i) Enlargement of Brain.
- ii) Development of grasping hand.
- iii) Great reliance on vision for exploration and communication.
- iv) Diversity in their arboreal and terrestrial habitats.

Types of social behaviour in Primates :-

Southwick and Siddique (1974) have graded primate social behaviour into following 6 types.

(A). Type - I Solitary → Eg- orangutan, eye-eye, lewis etc. They associates only for mating and on birth spring is dependent on its mother.

(B). Type II - Monogamous :- Eg- Gibbons, tree shrews, Lemurs, Marmosets etc. Monogamy is rare. However it is perfectly exemplified by Gibbons whose life long pair bond between a male and female and their strict territoriality maintained by elaborate "singing" especially at dawn; Show remarkable parallels to some birds. Gibbons are found in south America. Their groups induced 4-8 individuals constituting an adult male and adult female and upto 4 young ones. There is not much differences in body size of male and female. They have equal dominance. Both of them involves themselves in all activities with some intensity.

(C). Type - III - Single male groups with bonded females and offspring (unimale bisexual group) :- Eg- Hanuman langur, red howler monkey, red tail monkey, blue monkey etc. These are typically live in unimale bisexual groups, their groups may have 20-100 individuals, there will be just

One adult male grows big sized alpha dominant male which is called overlord or resident male. Rest of the group is headed by adult females sub. adult females, male and female juveniles and infants. Adult male in the leader and co-ordinator of group activity. He initiates and determines the direction of group, of movement and activity such as where to sleep etc.

Thus, in male bisexual groups of human language it is usually the adult male who alone defends the territory, the harem females away from intruding male of all group.

(D) Type IV - Polygynous single male groups with bonded females and offspring: - Eg - Baboons. These are large sized primates found in Ethiopia. The males have heavy mane around neck and have dog like muzzle. In their social organization several females are more or less permanently bonded to a single male forming a so-called "harem group". A number of such group bond bonded to a single male forming as a unit, perhaps 40 to 50 strong baboons.

The other baboons, olive baboon, yellow baboons and etc. also have units of comparable size but here there are no persistent male/female bonds. Adult male form temporary consortship with females as they come into oestrous but otherwise move generally within the group.

(E) Type V - Multimale bisexual group →: Eg - Rhesus monkey, Gorilla, Spider monkey, Squirrel monkey. Typically there are 3-8 adult males in the group each of which has 5-7 bonded females who remain with their infants. In a way there are many small units living together thus forming a big groups. Some time there are following two major types of individuals within multimale bisexual grouping.

(a). Those which do not divided in smaller breeding group.

E.g - Gorillas.

(b). Those which divides daily into smaller breeding groups.

E.g. Rhesus monkeys.

In Gorillas the group is typically a multimale bisexual type with several males and several females all the members remains together. The mks

have dominance hierarchy. The most dominant is called alpha beta and gamma.

Rhesus monkey is widely distributed in India and lives in large multimale bisexual groups. The males have dominance hierarchy and in them the bonded females acquire dominance from the male they have been mated or bonded with eg - alpha is most dominant male his bonded females will enjoy high place in dominance hierarchy among females and next of group members even their infants acquire that dominance. The dominant males can be identified easily by their confident walk and by their long strides, they carry their tails up and a subordinate male walks carefully and tucks its tail between the hind limb.

(F). Type-VI - Diffuse Social Parties :- eg - chimpanzee which are found in Guinea to Zaire, Uganda and so many place of South America.

The chimpanzees represent the living apes, the closest relatives of humans. Chimpanzees share about 99% of their genetic material with humans. Chimpanzees are expert climbers, nest in sitting posture and walk on hind limbs but run on all four limbs. Chimpanzees usually live in groups. male guard territory and restrict entry of males from other food availability is less.

Special feature of Primates Socialization :-

- (i) Primates grouping are close associations of conspecifics residing in a territorial limit.
- (ii) Group size may vary from 2 to 100 of members.
- (iii) The social grouping is based on the basis of rank relations with males and female of all ages.
- (iv) Reproduction is all year phenomenon and young ones have close relations with males and females of all ages.
- (v) The group composition is adapted to life in a certain environment. This must suite the ecological demand. For instance, Primates living in open tend to have smaller population density than those which are forest dwellers.

(vi) Primates societies lacks being following.

(vii) In Primates dominance and subordination are important feature and their relationships with others.

(viii) Besides above negative interaction, positive interaction do occur in between individuals of a group of Primates. There are many friendly contacts between animals as when they move and rest together.

(ix) Primates social organization is meant for constant exploration during daily walks on the basis of memory from the like purposes.

