# Social Behaviours: Social Hierarchy

Many animals live in social groups and have adapted their behaviour to group living.

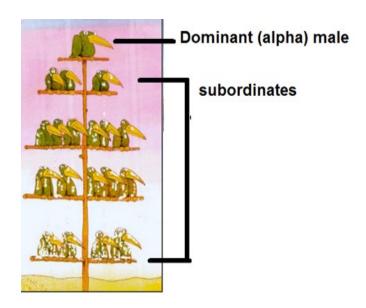
### 3 types of Social behaviours

- 1. Social Hierarchy
- 2. Cooperative Hunting
- 3. Social defence

### 1. Social Hierarchy

This is a rank/pecking order within a group of animals to reduce conflict consisting of

- 1. **<u>Dominant</u>** individuals carry out <u>**ritualistic**</u> displays.
- 2. <u>Subordinate</u> individuals carry out <u>appeasement</u> behaviour.



## **Advantages of Social Hierarchies**

- 1. Increase dominant male's **favorable gene**s being passed on to **offspring**.
- 2. Guarantees strong leadership.
- 3. Reduced conflict in group

# **Primates**

## **Parental Care**

Primates have a <u>long period</u> of <u>parental care t</u>o enable time for primates to <u>learn complex</u> <u>social behaviours.</u>

# 4 types of complex social behaviours

These behaviour support the social hierarchy by **reducing conflict between dominant & subordinates** 

Complex Social Behaviour	Ritualistic Display	Appeasement behavior
	(dominant anima)	(subordinate animal)
1.Body posture	Beating chest	Lie flat
	Hunched	Lie on back
	Swaggering	Expose neck and belly
2. Facial Expressions	Growling	Hide teeth
	Snarling	Whimper
	Showing teeth	
3.Sexual presentations	Show genitals	Hide genitals
4.Grooming	Groomed by lower rank	Groom higher ranks

#### <u>Alliances</u>

Low rank females form alliances with higher ranking females by grooming high rank offspring.

### Advantage

<u>Increases social status</u> of low rank females.

This allows them **better access to food/ mates** 

# **Cooperative Hunting and Defence**

#### **Co-operative Hunting**

When a group of animals **hunt together** to kill a prey.

Benefits BOTH subordinate animals as well as dominant animal.

### **Advantages of Co-operative Hunting**

- 1. Catch <u>larger</u> prey
- 2. Increases the chance of hunting success
- 3. Less energy used **per individual**
- 4. Gain more food than by foraging/hunting alone

### **Social Defence Strategies**

1. Adopt <u>specialised formations</u> when under attack (birds/fish)

#### **EXAMPLES**

mobbing
Bird/Fish deflection display

#### Advantage

- 1. Young protected
- 2. Confuses predator making it harder to pick off a single prey in large group.

### 2. Lookouts

Some individuals watch for predators whilst others can spend longer foraging for food.

Advantage

This <u>increases the chance of survival</u> by

- 1. avoiding predation
- 2. spending a longer period eating/foraging.