PATTERNS OF ANIMAL BEHAVIOUR
(LPM-609)

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Patterns of Animal Behaviour

- A behaviour pattern is an organized segment of behaviour having a special function.
- Each animal species has characteristic ways of performing certain functions and rarely go away from them.
- A female dog characteristically cleans its puppies by licking them and incidentally stimulating reflexes of defaecation and urination in the young ones.
- Reason of this behaviour is to keep the litter and its sleeping place clean which is correlated with the ancestors of dogs (Wolves) lived in lairs.

- Sheep and cattle live in open and move from place to place have no such patterns of eliminative behaviour.
- The nature of behaviour pattern is determined by heredity but can be modified by learning and training.
- A dog travels on four legs due to structure of body for effective means of locomotion under most circumstances, but taught to walk on hind legs for a short time.
- Patterns of behaviour are related to the fundamental anatomy and life process of animals; and extremely stable under conditions of domestication and even of intense selection.
- A cow, sheep or dog must use its native behaviour patterns even placed in unusual environmental circumstances

Causes of Behaviour

- Behaviour helps the animals to enable to adjust best to changes in internal and external environmental changes.
- A cow placed in milking stanchion attempts to break loose or stand quietly until released.
- Each behaviour pattern has some sort of primary stimulus which elicits behaviour in the absence of any previous experiences.
- **"Hiding"** reaction of young turkey is stimulated by the alarm call of the mother.

- Alarm reaction in young puppies are produced by any loud noise.
- Birds react to primary stimulus which are more specific than those stimulate the mammals and they have less ability to modify their behaviour by learning.
- Understanding the nature of primary stimuli peculiar to a species is a basic part of understanding an animal's behaviour and being able to control it in practical situations.

General causes of behaviour:

- General hereditary organization of the species which determines its behaviour patterns.
- Presence or absence primary stimulus which produces the behaviour.
- There must be some sort of changes in external environment or inside the body in order for the behaviour to occur.
- Animals organise their behaviour through the processes of learning and behave according to what they have learned from previous experience.

Daily and Seasonal Cycles of Behaviour

- The behaviour of animals living under the fairly uniform conditions typical to domestication, they often do the same thing each day at a regular time.

- Part of it is caused by habit formation (Cows gather around the barn just before milking time).

- Part of it is also caused by regular changes in environmental conditions as day changes to night and back to day.

  - ❖Animals are most active at the time of great change (At dawn and dusk).

❖Animals are least active either in the middle of the day or middle of the night.

- Part of it is also caused by internal physiological rhythms that are partially independent of the external events.

  ➢These recur at 24 hours intervals and called "Circadian Rhythms".

- Irrespective to the factors involved, most animals tend to live a highly regular existence from day to day.

- Animals also change their behaviour from season to season.
- This is due to direct response to changes in weather conditions.
- Grazing animals are more active at night during hot weather and less in cold weather.
- Seasonal changes in behaviour also accompany seasonal breeding activity.
- Most wild animals have regular breeding seasons resulting into regular seasons of birth and care of offsprings.
- In many domestic animals, the breeding season has been modified by artificial selection to increase fertility, but most still show a regular seasonal change in behaviour.

The Physiological Basis of Behaviour

- Since behaviour is an activity, it necessarily involves physiological function.
- Any sort of behaviour involves the reception of stimuli through sense organs, the transformation of these stimuli into neural activity, the integrative action of the nervous system and finally the activity of various motor organs (internal and external).
- Each special pattern of behaviour may have its own special physiology, activated by particular external stimuli which are transformed and transmitted over particular neural pathways so that integrated activity results.


THANKS