

Hello students, this program

is for Bachelor of Science,

first years semester two the Course

title is animal behavior and

The course code is a ZOC102.

The title of the unit is introduction

to animal behavior and the name of this

module is origin and history of ethology.

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working as assistant professor in

Zoology at Government College of Arts,

Science and Commerce,

Sanquelim the outline of this

module is introduction to ethology

and brief history of ethology.

At the end of this lesson,

the student will acquire an

understanding of animal behavior.

Let us begin understanding ecology

by defining it ethology is the

scientific study of animal behavior,

usually under natural conditions,

and viewing behavior.

As an evolutionary adaptive trait,

it is also called behavioral biology.

Animal behavior is a very popular subject,

not just with biologists,

but also with general public.

The term ethology is derived

from the Greek words ethos,

meaning character and logia,

meaning the study of behavior involves

the static postures and active movements,

the sounds and smell,

and the changes of color and shape

that characterize animal life.

There are two main approaches to

understanding behavior, the physiological.

And the whole animal behavioral Physiology

is the study of how the body works.

That is how the nerves,

muscles and sense organs are coordinated

to produce complex behavior such

as singing in a cricket or a bird.

The whole animal approach investigates

the behavior of the intact animal

and the factors that cause it.

For instance,

what is in the environment of the

cricket or bird that prompts them to sing?

At a particular time.

So behavior includes all those

processes by which an animal senses the

external world and the internal state

of its body and responds accordingly.

Many such processes will occur inside

the nervous system and are not observable,

but what is observable may

involve activity of varied

strength or no activity at all,

but equally rank as behavior.

Be it.

A cuckoo laying its eggs in a crow's

nest a pup wagging its tail at

the approach of an adult dog.

The warning hissing of a Viper

birds building their nests rabbits.

Digging its burrow or some

Beatles playing dead.

The study of animal behavior is all

about these things and many others.

Mere observations of an animal movement

and documentation of the same does

not make it an area of knowledge

to fully understand the behavior.

Certain aspects have to be considered.

Like what causes it?

How it develops in an individual,

how it benefits an Organism,

or how it has evolved.

Some behaviors are innate

or genetically hardwired,

where some behaviors are learned

or developed through experience.

Researchers who have studied
cuckoo songs or have found that
cuckoos when reared in isolation,
a major part of its song is innate.

But nuances of song are learned
from other individuals.

According to the records,
the term ethology was first used by
Isidore Geoffroy Saint Hilaire in 1859,
but he used the term ethology for
the study of relations between
an Organism and its environment.

The area of study referred to as
ethologie is now recognized as ecology.

However, an American myremecologist
William Morton Wheeler popularized
this term in its modern context only
in 1902 ethology has its scientific
roots in the work of Charles Darwin.

Darwin was the first ethologist who's
book the expression of the emotions in

man and animals influenced many ecologists.

His work is, however,

considered as a forgotten masterpiece.

Charles Ottis Whitman,

an American zoologist,

is influential to the foundations

of classical ethology.

His paper animal behavior contains many

well chosen examples of innate behavior.

His major work concentrated on courtship.

And breeding behavior of passenger pigeons.

Oscar Heinroth was a German biologist,

an ornithologist and regarded as

one of the founders of ethology.

He was the first to apply methods of

comparative morphology to animal behavior.

He made extensive studies of

behavior in ducks and geese.

He hypothesized that many of their

instinctive behavioral patterns and

morphological features correlated

with their life histories.

He suggested that the conspicuous

wing patterns of ducks might

serve to guide flocks in flight.

He noted behaviors of dogs

and those of hybrids,

and suggested that their

behavioral cues could be used to

deduce taxonomic relationships.

He also noted that chickens were alarmed

by long tail and short necked birds,

suggesting that these were the key

characteristics of birds of prey.

The idea that this response was

instinctive was examined in greater

detail by Konrad Lorenz and

Niko tinbergen Wallace Craig great an

American experimental psychologist

and behavioral scientist provided

a conceptual framework for the study

of behavior organization and is also

regarded as one of the founders of ethology.

He experimentally studied the

behavioral expression of emotions the

way innate and learned behavioral

tendencies are integrated,

and how vocal as well as social

behaviors are organized.

He encouraged the view of behavior as

an integrated process with evolutionary

motivational experimental, social,

and ecological degrees of freedom.

This integrative perspective helped

shape modern behavioral science.

The modern discipline of ethology.

is generally considered to have

begun during the 1930s with the work

of Dutch biologist Nikolas

Tinbergen and of Austrian biologist

Konrad Lorenz and Karl von Frisch.

In 1973. Nobel Prize for Physiology.

Was awarded to these pioneering

ecologists who demonstrated that
behavioral traits can be measured,
and they have evolutionary histories.

Their work recognized that animal behavior,
although simpler than that of human beings,
nonetheless.

Contains many aspects that are similar
and that such research contributes
to the understanding of humans.

nature these are the

references which you can refer
for the history of ethology.

Thank you.