



*VMKSR VASTRAD ARTS, SCIENCE &
VS BELLIHAL COMMERCE COLLEGE
HUNGUND*

POULTRY

PROJECT DONE BY

CHANCHAL.S.VAISHNAV

BSC 6TH SEMESTER

ZOOLOGY

RANI CHANNAMMA UNIVERSITY BELAGAVI

2021-2022



**V M K S R VASTRAD ARTS, SCIENCE,
V S BELLIHAL COMMERCE COLLEGE
HUNGUND**

PROJECT REPORT

College roll no: 53

Examination seat no: S1937020

CERTIFICATE

This is to certify that Miss: **Chanchal.S.Vaishnav** of BSc 6th semester has satisfactory completed the project report in Zoology subject as prescribed by Rani Chennamma University Belagavi.

DURING YEAR 2021-2022

Examiner:

Head Dept of Zoology

1) Dmaha
6/9/22

2) D

Head of the Department,
Department of Zoology,
V. M. S. N. Vastrad Arts, Science &
V. S. Bellihal Commerce College,
Hungund,
Dist: Bagalkot

DEFINITION: Poultry is defined as domestication of birds for obtaining their feathers, eggs, meat etc..

INTRODUCTION: These birds are most typically members of super-order Galloanserae(fowl), especially the order Galliformes(which includes chickens, quails, turkeys). Poultry science is study of practices & marketing of poultry & its products. It include breeding, nutrition, management, housing, disease control, marketing.

Mostly chickens are farmed in great numbers. More than 60billion chickens are killed for consumption annually. Chickens raised for eggs are known as layers, while chickens raised for meat are called broilers.

Poultry birds classified on basis of

- 1) Utility
- 2)Economic value
- 3)Purpose & these include ; meat type, egg type, dual purpose, game, ornamental etc.

Birds of distinct type & color patterns admitted to standard are termed as "Standard breed"

<i>BIRD</i>	<i>WILD ANCESTOR</i>	<i>DOMESTICATION</i>	<i>UTILIZATION</i>
Chicken	Red jungelfowl	Southeast Asia	Eggs & Meat
Turkey	Wild turkey	Mexico	Meat
Duck	Mallard	Various	Meat

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Chicken	Red jungelfowl	Southeast Asia	Eggs & Meat
Turkey	Wild turkey	Mexico	Meat
Duck	Mallard	Various	Meat

Goose	Greylag	Various	Eggs & meat
Guinea Fowl	Helmeted Guinea fowl	Africa	Eggs & Meat
Pigeon	Rock dove	Middle east	Meat

They are further classified into 4 types namely Class, Breed, Variety, Strain.

Class: It is used to designate a group of breed which have been developed in certain regions or geographical areas. Ex; Asia, England, America.

Breed: It is used to establish group of birds having same bony shape, weight, some common characteristics.

Variety: It represents sub-division of breed, distinguished either by color patterns, shape, and comb type or feather pattern.

TYPES OF CHICKEN BREEDS

There are more than 100 breeds. The commonly farmed chicken breeds are categorized into 5 based on purpose for which it is farmed. They are namely Egg layers, Boiler type, Dual type, Games & Ornamental types

1)Egg Layers: These are farmed mainly for the production of egg.

i)Leghorn: This is most popular commercial breed in india & originated from Italy. They are small, compact with single comb & wattles with white, brown/black color. They mature early & begin to lay eggs at age of 5/6

months. Hence these are preferred in commercial farms. They can also thrive well in dry areas.

ii) Chittagong: It is breed chiefly found in west Bengal. They are golden /light yellow colored. The beak is long & yellow in color. Ear lobes & wattles are small & red in color. They are good egg layers & are delicious.

2) Broiler type: These are well known for fast growth & soft quality meat.

i) White Plymouth rock: They have white plumage throughout the body. It is commonly used in broiler production. This is an American breed. It is fast growing breed & well suitable for growing intensively in confined farms.

3) Dual purpose breeds: These are for both meat & egg production purpose.

i) Brahma: It is breed popularly known for its massive body having heavy bones, well feathered & proportionate body. Pea comb is one of the important breed characters. It has 2 common varieties namely; Light Brahma, Dark Brahma.

4) Game breeds: Since ancient times, special breed of roosters have been used for sport of cockfighting.

i) Aseel: This breed is white/black in color. Hens are not good egg layers but are good in incubation of eggs. It is found in all states of India. Aseel is noted for its pugnacity, high stamina, & majestic gait & dogged

fighting qualities. Although poor in productivity, this breed is well known for their meat qualities.

5) Ornamental breeds: Ornamental chicken are reared as pets in addition to their use for egg production & meat.

i) Silkie: It is breed of chicken has a typical fluffy plumage, which is said to feel like silk & satin. The breed has numerous additional special characters, such as black skin & bones, blue earlobes, & five toes on each foot, while the majority chickens only have four. They are exhibited in poultry shows, & come out in various colors. Silkies are well recognized for their calm, friendly temperament. Silkie chicken is especially simple to maintain as pets.

WORLD CHICKEN POPULATION

The food & agriculture organization of the united nations estimated that in 2002 there were nearly 16 billion chickens in the world. In 2008 top countries with highest number of chickens in world was led by china with largest at approximate 4.6 billion, followed by USA with approximate 2 billion & then followed by Indonesia, brazil, mexico. In 2019 china had over 5.14 billion chickens, higher amount than any other country in world, followed by Indonesia with approximate 3.7 billion chickens. The countries with next highest amount were USA, Brazil, Pakistan, Iran, India, Mexico, Russia & Myanmar.

Cross breed poultry evolved from ICAR

✚ Vanaraja

✚ Giriraja

VANARAJA: Vanaraja is crossbreed of chicken in India. Vanaraja male line is red colored meat type breed & was developed from strain(IC-3) of red Cornish breed. Vanaraja female line has been developed from colored synthetic broiler control & being selected for egg production ton40 weeks of age for last eight generations.



Vanaraja

GIRIRAJA: It is breed of chicken developed by Karnataka veterinary university in Bellary, India. It is cross breed of desi breed poultry & white leghorn. Giriraja females lay a large number of eggs, 130-150 per year, with each egg weighing 52-55grams.their shells are brown in color & thicker than that of other commercial eggs, & resist breaking.



GIRIRAJA

POULTRY BY PRODUCTS

The feathers of poultry birds are used for making pillows, quilts. Droppings of poultry can be used as manure in field. The droppings are rich in nitrogen, potash and phosphates.

A number of poultry by products like blood meal, feather meal, poultry by-products meal & hatchery by-product meal are used as good sources of nutrients for meat producing animals & poultry. These byproducts supply proteins, fats, vitamins & good amount of minerals.

POULTRY HOUSING

Poultry production system should provide fresh air, clean feed & water, protection against predators, shelter from cold, rain, wind sun & excessive heat; as well as source of heat when birds are young. Basically, the birds need to be able to grow, sleep & lay eggs in comfort. The birds should also be free from stress & disease.

The basic requirements for poultry housing are:

- 1) Protection from weather
- 2) Protection from predators
- 3) Enough space
- 4) Adequate ventilation
- 5) A clean environment
- 6) Access to dust bathing facilities

SYSTEM OF POULTRY HOUSING:

1) Deep litter system : Birds are fully confined within a house (3-4birds /m²) but can move around freely. The floor is covered with deep litter(5-10cm deep layer)of grain husks (maize/rice), straw, wood shavings or similarly absorbent, non toxic material.

The fully enclosed system protects the birds from thieves & predators & is suitable for specially selected commercial breeds of egg or meat producing poultry(layers, breeder flocks, & broilers)

2) Slatted floor systems: Wire or wooden slatted floors are used instead of deep litter, which allow stocking rates to be increased to five birds/m² of floor space.

Birds have reduced contact with faeces & are allowed some freedom of movement. Faeces can be collected from below the slatted floor & used as fertilizer.

3) Battery cage system: This is usually used for laying birds, which are kept throughout their productive life in

small cages. There is high initial capita investment, & system is mostly confined to large scale commercial egg layer operations.

BROILER MANAGEMENT OF POULTRY

- Since the broilers are being reared for meat it is important that they always have an adequate supply of high quality broiler feed.
- As the birds get heavier they will need more floor space & ventilation
- It may be well to use nightlights equivalent to 15 watts per 200square feet. This allows birds to eat at night & helps prevent piles-ups.
- Keep litter dry to help prevent bried blisters. Provide ample cool & clean water.

PULLET MANAGEMENT OF POULTRY

- Feed starter & grower feeds as outlined under feed & water section.
- Keep young & old birds separated. If it is necessary for one person to care for young & old birds care for young birds first each day.
- Remove any unthrifty pullets
- Keep birds free for parasites.
- Keep complete & accurate records.

LAYER MANAGEMENT OF POULTRY

- Clean & disinfect laying house before placing pullets in it.
- If floor management is used, put in 4-6 inches of clean litter.

- House only well developed & well fleshed pullets.
- Use artificial light to provide 14 hours of total light per day- 140 watt bulb per 200 square feet, hung 8 feet above the floor.
- Use feeding program as outlined one.
- Keep birds free of parasites.
- Keep complete & accurate records.
- Remove obvious culls.

Debeaking: It is cutting off part of the upper beak. It helps in preventing pecking injuries & cannibalism among chicks.

INCUBATION AND HATCHING PROCESS OF POULTRY

- 1) Hatching egg production & care: keep 1 male for each 10-12 females.
 - Males should be kept with females' at least 1 week prior to saving hatching eggs to ensure high egg fertility.
 - Feed a complete diet.
 - Collect eggs at least 3 times per day.
 - The hatching of fertilized eggs requires about 21 days & hatching takes place at 38°C temperature.

BROODING OF POULTRY

The care & management of young chicks during early part of their life called brooding i.e. up to 3-4 weeks.

BROODERS

- 1) *HOOVER TYPE:* Follow manufacturer's direction. Starting temperature at edge of Hoover should be 95°F. For the 1st week & reduced 5°F each week.

2) *HEAT LAMP*: Use either white or infra-red heat lamps.

3) *HOMEMADE BROODER*: An inexpensive method of supplying heat to few chicks is to place a 100watt light bulb inside a gallon tin can & place the can on the floor of brooder house.

POULTRY DISEASE & CONTROL

Poultry disease can be classified non-infectious & infectious disease.

Non-infectious disease can be faulty management, faulty feed preparation & inadequate diet/nutritionally efficient disease.

Infectious disease can be viral, bacterial, fungal & tend to be most common since they spread from bird to bird. Affects to birds intestinal, nervous, immune, respiratory/reproductive as well as their skin.

COMMON DISEASE IN CHICKEN

1) Fowl pox:

Symptoms- Fowl pox come in 2 form namely from wet & dry. In dry form unfeathered areas of bird will have wart like lesions that heal in 2 weeks. In wet form lesions appearing around the mouth & discharge from you're birds eyes.

Control- There is no treatment for fowl pox but it will go within 2 weeks but should take care about it. There are special vaccinations, if any bird show sign of

infection make them quarantine, also control mosquitoes in chicken enclosure since they are transmit from flock to flock.

2) Coccidiosis:

Symptoms- when you're chicken loose droppings, its lightly have coccidiosis. Parasite that damage gut wall of chicken. You may also notice diarrhoea, weight loss, ruffled feathers in chicken.

Control- Treat with antibiotics. Keeping food areas, brooders, & coops clean & dry. Using medicated starter feed for your unvaccinated chicks.

3) Infectious bronchitis:

Symptoms: chickens get cold it's just as contagious. If the flock become infected, it noticed that egg production will drop the consumption of food & water will decline. They may be discharge watery mucus from bird's eyes & nostrils.

Control: You can give antibiotics for few days. And there is vaccination as like fowl pox disease. Having a good bio security method in place as well as adequate rodent control should help keep disease minimum.

BENEFITS OF POULTRY

- It doesn't require high capital for construction & maintenance of poultry farming.
- It doesn't require a big space

- It ensures high return of investment within a very short period of time.
- Feathers in poultry are used for making pillows, fancy articles & curios.
- It offers good full time & part time employment opportunity to farmers.
- A poultry dropping that is wastes are nitrogenous & considered good for fertilizers.
- It provides fresh & nutritious food & has huge global demand.

CONCLUSIONS: Poultry farming is the easiest establishing & profitable business worldwide. If we think of the protein source which is much need for human body, poultry farming is continent & cost effect source of protein since ancient period.



**V.M.K.S.R.VASTRAD ARTS, SCIENCE, &
V.S. BELLIHAL COMMERCE COLLEGE HUNGUND.
PROJECT REPORT**

College Roll No: 48

Examination seat No: S2041617

CERTIFICATE

This is to certify that Mr./Miss: **Bhagyashree M Nadagoudar** of B.Sc 5th semester has satisfactorily completed the Poultry project report in Zoology subject as prescribed by the Rani Chennamma University Belagavi.

During year 2022-2023

Examiner:

- 1).....*Amaly*.....
2).....*VZAD!*.....

Amaly
**Head of the Department,
ZOOLOGY.**
V. M. S. R. Vastrad Arts, Science and
V. M. Commerce College,
HUNGUND. Dist: Bagalkot



V.M.K.S.R Vastrad Arts, Science and V.S.Bellihal Commerce College, Hunagund.

Report on field visit for V B.Sc. Zoology students

Submitted to The Principal

Excursion In charge: Asst.Prof Nayana Mara (Head of the Zoology Department)

Staff Accompanied for the study tour: Miss. Sindhu.N.Muradi

Attender Mrs. S. Hiremath

No of Students: 28

Date: 16/01/2022 Time: 11:00 am to 3:00 pm Day: Monday

Objective of the visit: To study the different poultry breeds and maintenance in poultry farm.

About the place:

Near JB hospital opposite, paramjyoti carcare near to Thondihal cross Ilkal. TQ-Ilkal DIST-Bagalkot 587125. Kalligudda farming is well known poultry farming in Tondihal near to Ilkal area we collect the information about different poultry breeds, maintenance of poultry farm, diseases of poultry and cage system, rearing of egg, Equipments used in poultry and its products.

Purpose of the tour:

To study the Poultry unit,

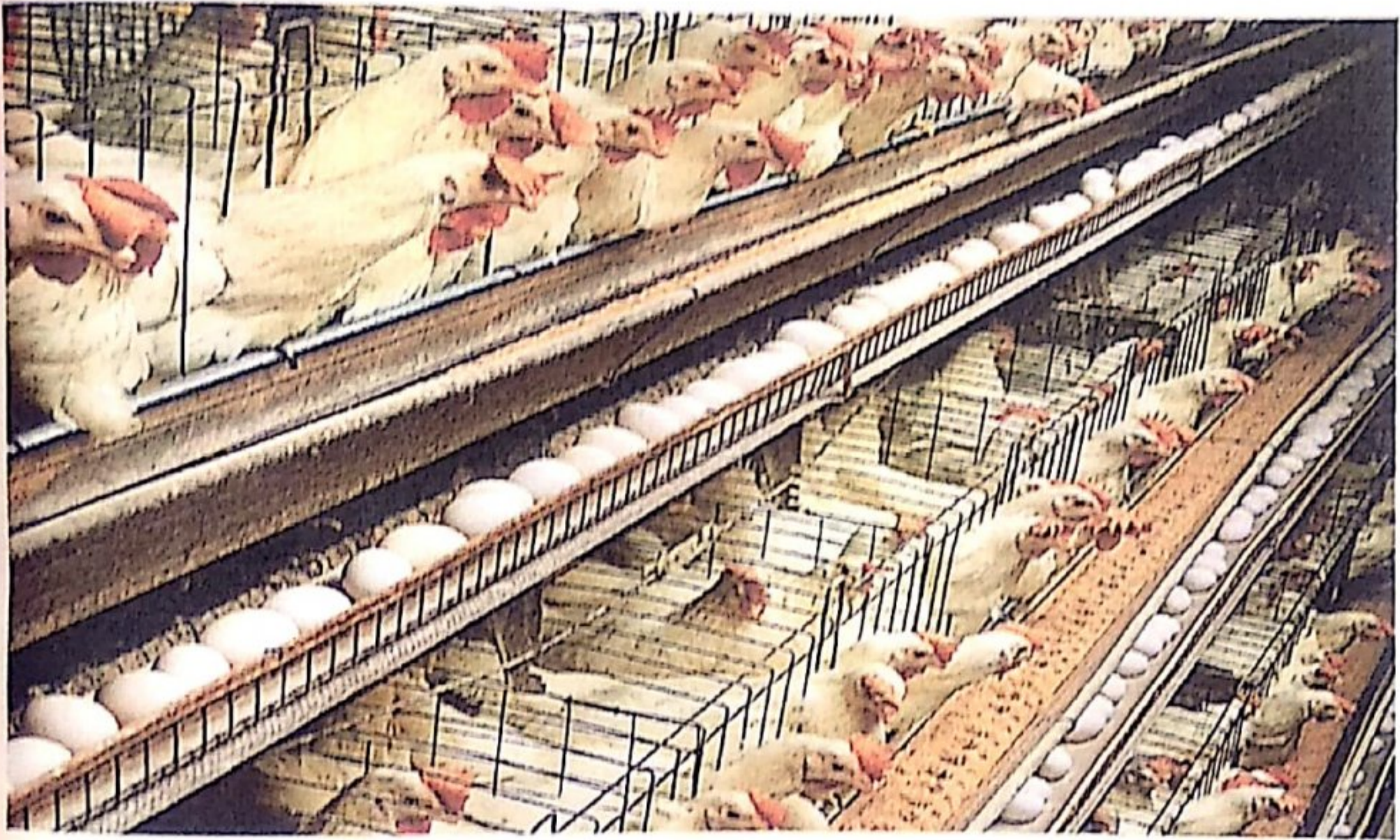
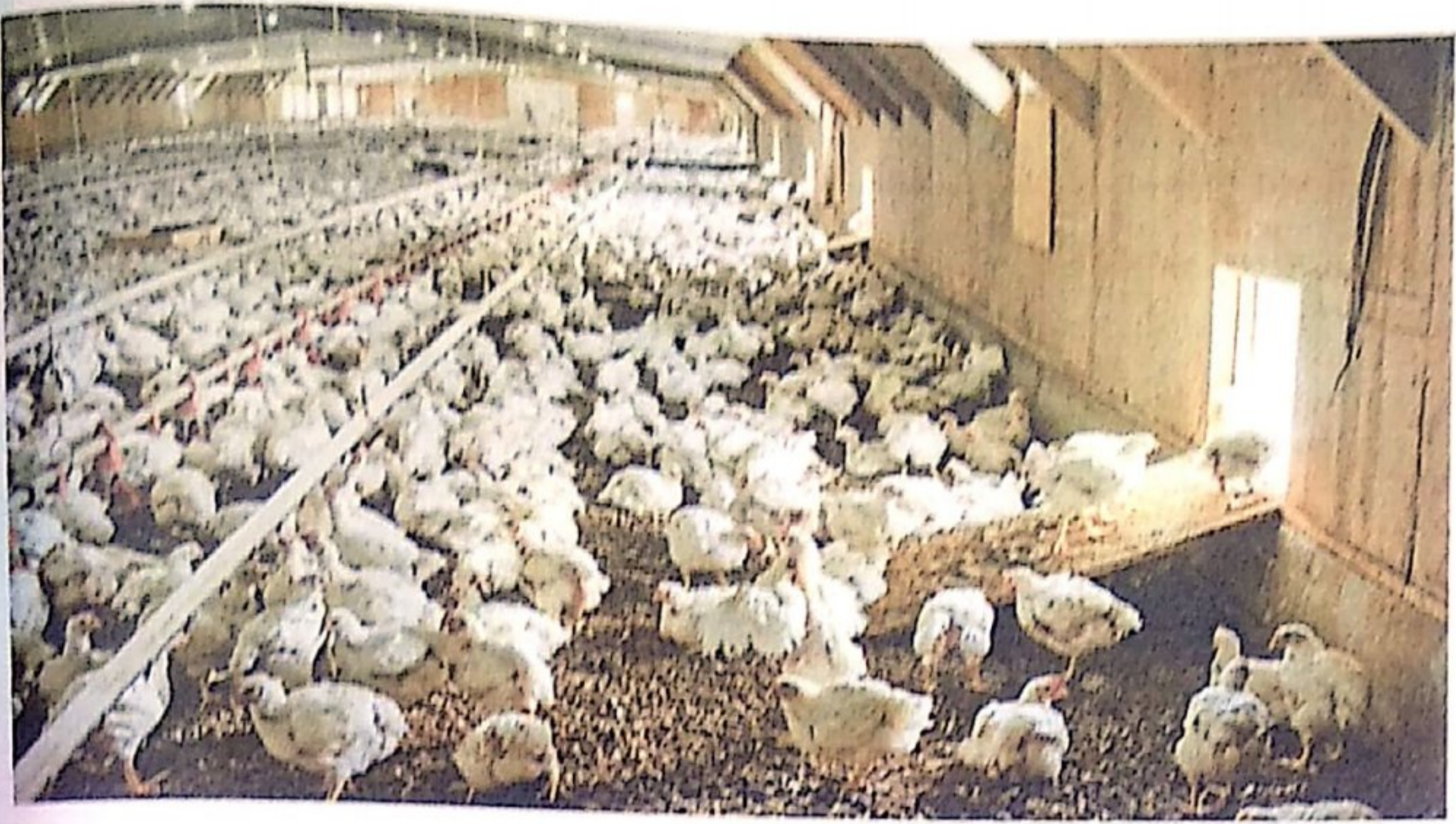
Equipments used in poultry,

Construction and maintenance of poultry farming,

Benifits of poultry,

Strengthen the friendship among students and student Teachers relationship.





Outcome of the field visit:

Field visit to natural environments provide opportunities for students to learn, develop new interests, and improve environmental attitudes and behaviours. This study points to the importance of poultry farming is the easiest establishing & profitable business worldwide. If we think of the protein source which is much need for human body, poultry farming is continent and cost effect source of protein since ancient period. Particularly when the guide is instrumental in shaping the field visit activities.

On a guide-directed field visit, when the guide tells interesting stories, offers opportunity for exploration, explains discoveries, relates experiences to everyday life, and clarifies concepts learned in College, students experiences can be enhanced, with greater learning, attitudes.

It was an amazing and informative field visit to Kalligudda poultry farming in Tondihal near to Ilkal is well known in Tondihal near to Ilkal.

From,

Asst Prof.Nayana Mara

Head of the Department Zoology

V.M.K.S.R Vastrad Arts, Science and

V.S.Bellihal Commerce College,

Hunagund 587118



**V.M.K.S.R.VASTRAD ARTS, SCIENCE, &
V.S. BELLIHAL COMMERCE COLLEGE
HUNGUND.**

PROJECT REPORT

College Roll No: 70

Examination seat No: S2041630

CERTIFICATE

This is to certify that
Mr./Miss: Kaveri S. Yargeri. of B.Sc 5th semester has
satisfactorily completed the Poultry project report in Zoology
subject as prescribed by the Rani Chennamma University
Belagavi.

During year 2022-2023

Examiner:

1)..... Amale

2)..... [Signature]

[Signature]

Amale
Head of the Department,
ZOOLOGY,
V. M. S. R. Vastrad Arts, Science and
V. M. Commerce College,
HUNGUND. Dist: Bagalkot



V.M.K.S.R Vastrad Arts, Science and V.S.Bellihal Commerce College, Hunagund.

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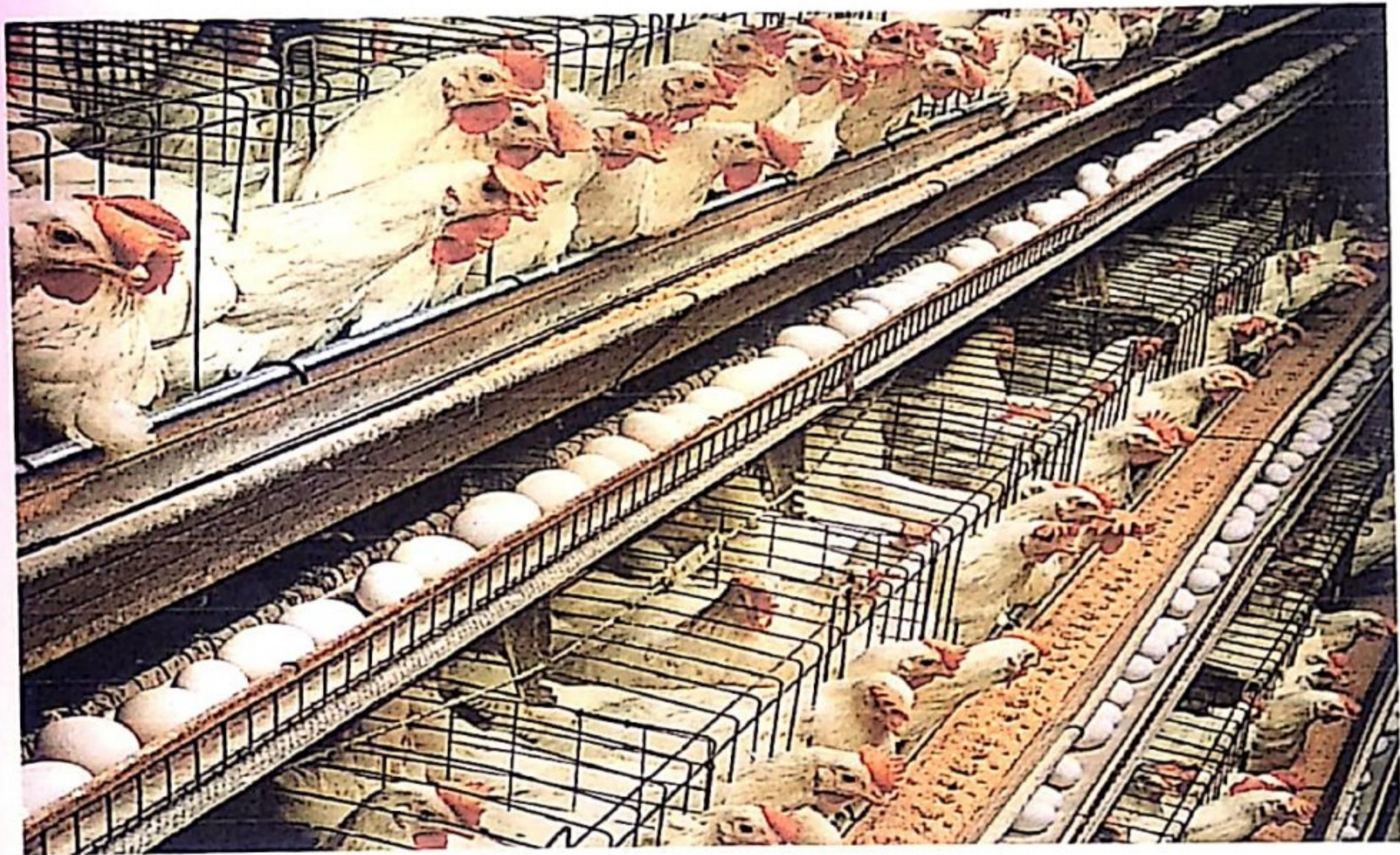
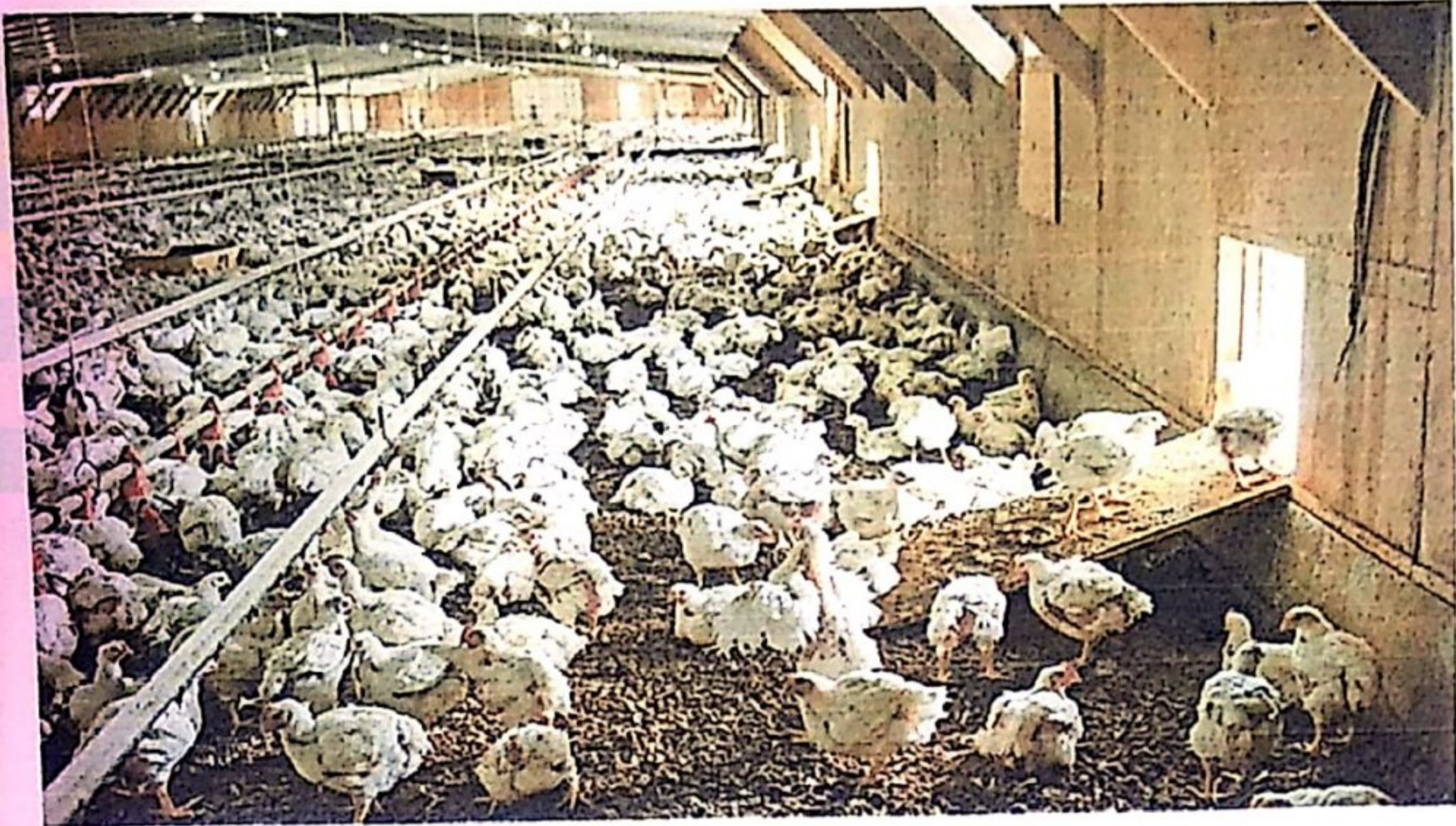
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From,

Asst Prof.Nayana Mara

Head of the Department Zoology

V.M.K.S.RVastradArts,Scienceand

V.S.BellihalCommerceCollege,

Hunagund 587118



**V.M.K.S.R. VASTRAD ARTS, SCIENCE, &
V.S. BELLIHAL COMMERCE COLLEGE HUNGUND.**

PROJECT REPORT

College Roll No: 72.

Examination seat No: S2041634.

CERTIFICATE

This is to certify that **Miss: Laxmi M Amblikoppa** of B.Sc 6th semester has satisfactorily completed the project on local biodiversity in Zoology subject as prescribed by the Rani Chennamma University Belagavi.

During year 2022-2023.

Examiner:

1). *[Signature]*

2). *[Signature]*
12/9/23

Valued
Alexand
12/9/23

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Proposed Research Work

PROJECT TITLE :

“ PROJECT ON LOCAL BIODIVERSITY “

INTRODUCTION :

Hungund taluka is located in the Eastern part of Bagalkot district. It lies between 15° - 52° & 16° - 16° north latitude and 75° - 50° to 75° - 20° east longitude. The taluk has Muddebihal taluk of Bijapur district on the north. Raichur district on the east Kushtagi tq of Koppal district to the south Bagalkot tq on the north west & Badami tq south west & Ron tq of Gadag district on south east. It has an area of 135 sq Kms, with a population of 2.88 lakhs as per 2011 census. The density of population is 181 per sq km. Taluka gets an average rainfall of 597 mm per year. The taluka touches Malaprabha river on south & Krishna on the northern boundary. Krishna & Malaprabha meet at famous historical place Kudalsangam, of Hungund tq. Malaprabha is a seasonal river, going dry in winter & summer months. Whereas Krishna is perennial. These rivers irrigate an area of approximately 7439 ha. The total irrigated land is 8615 ha of which 800 ha is irrigated by Bore well & open wells. 7.2% of the land is under forest & 1.8% land is uncultivable land.

Major crops in Hungund tq are Jowar. Bajra & in the Kharif, wheat, sunflower, cotton in The Rabi. In spite of two rivers, the taluka has not used irrigation to the fullest extent.

Recently sugar cane is being grown in small patches. Poultry is concentrated near Gudur, mainly in egg production units.

Hungund is included in the list of "more back ward" taluk of Bagalkot district. Majority units are concentrated near Ilkal. They are in the area of pink granite mining and cutting & polishing.

Demographics

As of 2001 India census, Hunagund had a population of 18,035.

Males constitute 51% of the population and females 49%. Hungund has an average literacy rate of 64% higher than the national average of 13% of the population is under 6 year of age. Kannada is the most widely spoken language in the taluk

Economy

Agriculture is the largest employer in Hungund. The chief crops cultivated are rabi and jowar, as well as groundnut, gram tuvar daal and moong daal. Ilkal is famous for Ilkal saree and Red Granite.

Education

Hungund and Ilkal have some of the most famous educational institutions in the region. Vijay Mahanntesh high school in Hungund was established in 1915 as Anglo Vernacular School. Hungund also has a Rural Polytechnic college

Industry:

The people from are very industrious and are backed by good background of business. The main source of income is the Granite

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business and weaving is a wide spread occupation. The agricultural land is not arable and it faces the threat of pollution because of the granite activities involved and water shortage. Hence forth the agriculture provides a very little employment opportunity to the locals' .jowar, sunflowers are the major crops grown here and agriculture is rain dependent.

The granite brings in a lot of revenue and the business is well established. The quarries and mines nearby are excavated for the raw stone processed and polished and marketed. It is an important export commodity from the place and town has welcomed immense urbanities from the states as far as Rajasthan an Orissa.

The nearby villager and other have widely benefited and affluence and it is main employment for the people of the regions. The important products are Ruby Red, Ilkal chocolate, Cats eye & Mudagal grey.

PEACOCK:



Scientific name: *Pavo cristatus*

Mass: 4 – 6 kg (Male, Adult), 2.8 – 4 kg (Female, Adult)

Domain: Eukaryota

Family: Phasianidae

Kingdom: Animalia

Order: Galliformes

The Peacock or the common Peafowl, is the gorgeous bird of India. It is called 'Mayura' in Sanskrit, 'More' in Tamil and Malayalam, 'Nemali' in Telugu and 'Navilu' in Kannada. Its ornithological, and feeding on insects, lizards and snakes apart from grain and vegetables shoots. It is a bird to which a great deal of religious significance is attached in our culture. It is closely associated with Subramanya or Kathikeya, who is the commander in chief of the celestial forces – Deva Seanpati.

Kathikeya is not just a war lord. In the famous Kathikeya temple at Sandur. The deity is in the form of a celibate or Bhahamachari. But further South in Tamilnadu the same god, who is popularity known as Murugan, has two is popularity known as Murugan, has two consorts, Valli and Devayani.

Let us look at the behavior of the peacock in the nature. It is normally found in the world with the four and five peahens, which constitute his entourage, his instinctive following in the right season. The females are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which is such distinctive features of the male in full plume. The peacock is a shy bird and does not even take chase his own idea of courtship. In the spring season when nature is green and beautiful, it chooses an open area in the lush undergrowth to indulge in his grand courtship display with dignified patience and intensity.


The spot is a vantage point where he can see the females, and more importantly the female in his orbit can see him.

Pigeons and Doves



Classification

- ▶ Kingdom: Animalia
- ▶ Phylum: Chordata
- ▶ Class: Aves
- ▶ Order: Columbiformes
- ▶ Family: Columbidae
- ▶ Genus: *Columba*
- ▶ Species: *Columba livia*




Zoological Classification

▶ Kingdom:	Animalia
▶ Phylum:	Chordata
▶ Subphylum:	Vertebrata
▶ Class:	Aves
▶ Order:	Columbiformes
▶ Species:	Columbidae

Pigeons and doves exhibit considerable variation in size, ranging in length from 15 to 75 centimeters (5.9 to 29.5 in), and in weight from 30 g (0.066 lb) to above 2,000 g (4.4 lb). The largest species is the crowned Pigeon of New Guinea, which is nearly turkey-sized, at a weight of 2-4 kg (4.4-8.8 lb). The smallest is the New world ground dove of the genus *Columbina*, which is the same size as a house sparrow, weighing as little as 22 g (0.049 lb). With a total length of more than 50 cm (20 in) and weight of almost 1 kg (2.2 lb), The largest arboreal species is the Marquesan imperial pigeon, while the dwarf fruit dove, which may measure as little as 13 cm (5.1 in), has a marginally smaller total length than any other species from this family.

Overall, the Columbidae tend to have short legs, short bills with a fleshy cere, and small heads on large, compact bodies. In a series of experiments in 1975 by Dr. Mark B. Friedman, using foves, their characteristic head bobbing was shown to be due to their natural desire to keep their vision constant. It was shown yet again in a 1978 experiment by Dr. Barrie J. Frost, in which pigeons were placed on treadmills; it and have eleven primary feathers, and low wing loading; pigeons have strong wing muscles (wing muscles comprise 31-44% of their body weight and are among the strongest fliers of all birds. They are also highly manoeuvrable in flight.

Seeds and fruit from the major component of the diets of pigeons and doves. In fact, the family can be divided into the seed-eating or granivorous species (subfamily Columbinae) and the fruit-and-must-eating or frugivorous species (the other four subfamilies). The granivorous species typically feed on seed found on the ground, whereas the frugivorous species tend to feed in trees. There are morphological adaptations that can be used to distinguish between the two groups: granivores tend to have thick walls in their gizzards, intestines, and esophagi whereas the frugivores tend to have thin walls. In addition, fruit-eating species have short intestines whereas those that eat seeds have longer ones. Frugivores are capable of clinging to branches and even hang upside down to reach fruit.

In addition to fruit and seeds, a number of other food items are taken by many species. Some, particularly the ground doves and quail-doves, eat a large number of prey items such as insects and worms. One species, the atoll fruit dove, is specialized in taking insect and reptile prey. Snails, moths, and other insects are taken by white-crowned pigeons, orange fruit doves, and ruddy ground doves.

Male pigeons are more opportunistic to mate with another female.

LOCAL FAUNA : BIRDS

CROWS :



classification of the

- Kingdom: Animalia
- Phylum: Chordata (with backbones)
- Class: Aves (birds)
- Order: Passeriformes (songbirds)
- Family: Corvidae (crows, jays)
- Genus: *Corvus*
- Species: *brachyrhynchos*

Crow bird is a member of the Corvidae family. Its genus *Corvus* is widely spread across the world with more than forty identified species. Researchers link the evolution of these birds to the corvid stock in Asia which originated in Australia.

All the species have the same appearance without much difference between the genders. They are entirely black in color while some possess slightly grey or white colored plumage. Their beaks and legs are strong while the overall body is stout.

The species spread from Asia to several other places including Europe, Australia, North America and Australia. In fact, they are widely distributed over all temperate regions, however. The places where they are not found include South America,

Read on to find out more interesting information about these intriguing animals found

Commonly all over the world.

Facts about Crows

Following are some of the amazing facts about crows.

- Their origin dates back to seventeen million years ago in Australia.
- They are extremely intelligent with some species which can even construct and use tools
- During a search, they scored better than Bonobo Chimpanzees when tested for intelligence.
- Their fore brain is more developed and complex as compared to that of all other birds.
- They can adapt to a variety of living conditions. That is why their habitat extends over a considerable large part of the earth.
-

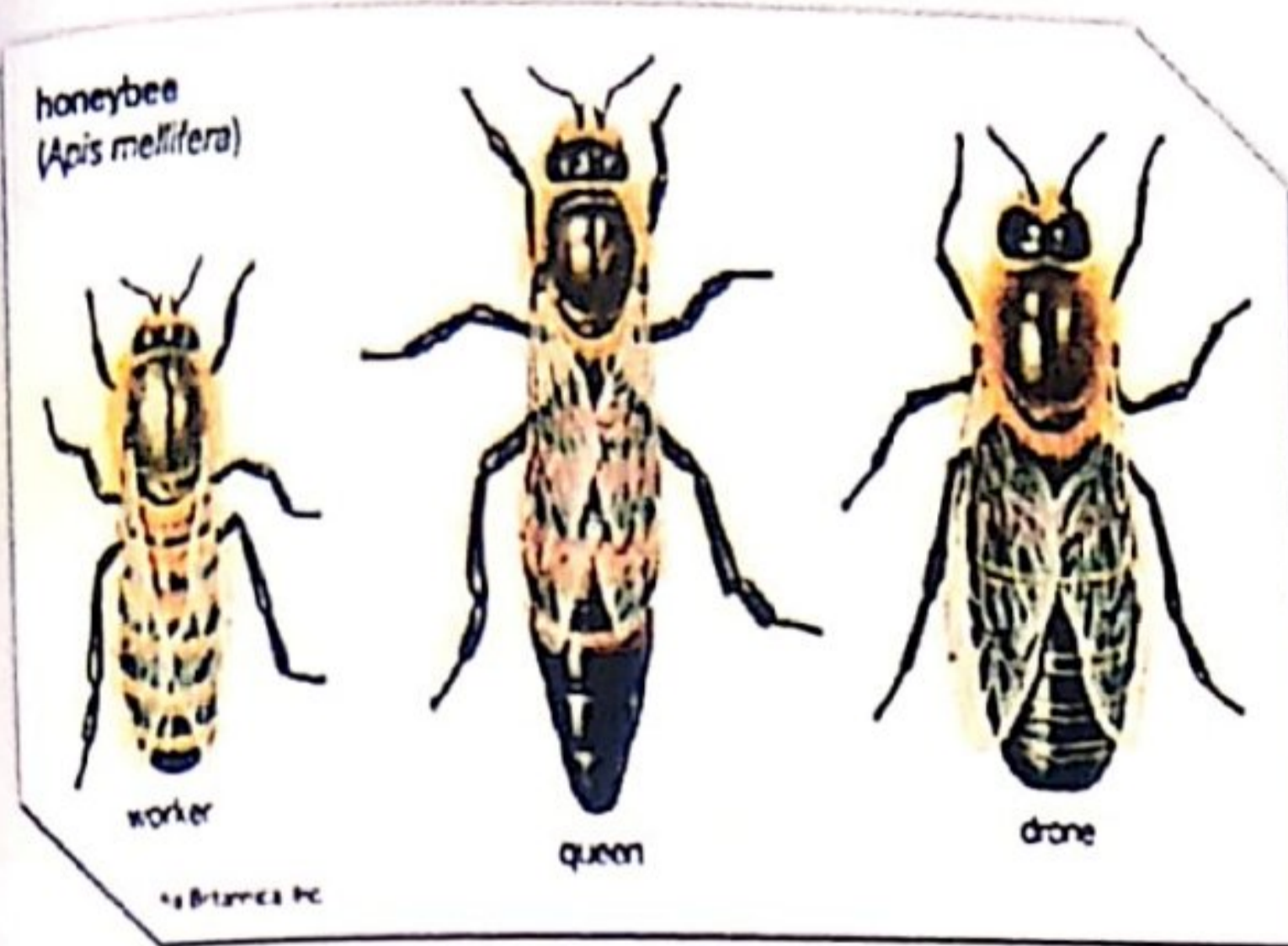


What do Crows Eat

You will be surprised to find out what do crows eat. As they are omnivores, their diet is Not limited to grains and plants. In fact, they also feed on meat. Their strong beaks Help them search for and catch insects. Among crows, corn is their favorite. They may Pick food from the nests of other birds. They also feed on eggs and young birds when Found in nests unattended by their parents. On the other hand, their diet also includes Small insects. This makes them very useful for farmers as they often feed on pests Found in fields. These include grasshoppers, cutworms and wireworms. In addition, They also remove certain weeds growing in farms.

They can also be found rummaging around for their food in garbage cans. They may Use their own tools for carrying out this search.

INSECTS



Kingdom : Animalia

Phylum : Arthropoda

Class : Insecta

Order : Hymenoptera

Family : Apidae

Genus : Apis

Species : A. mellifera

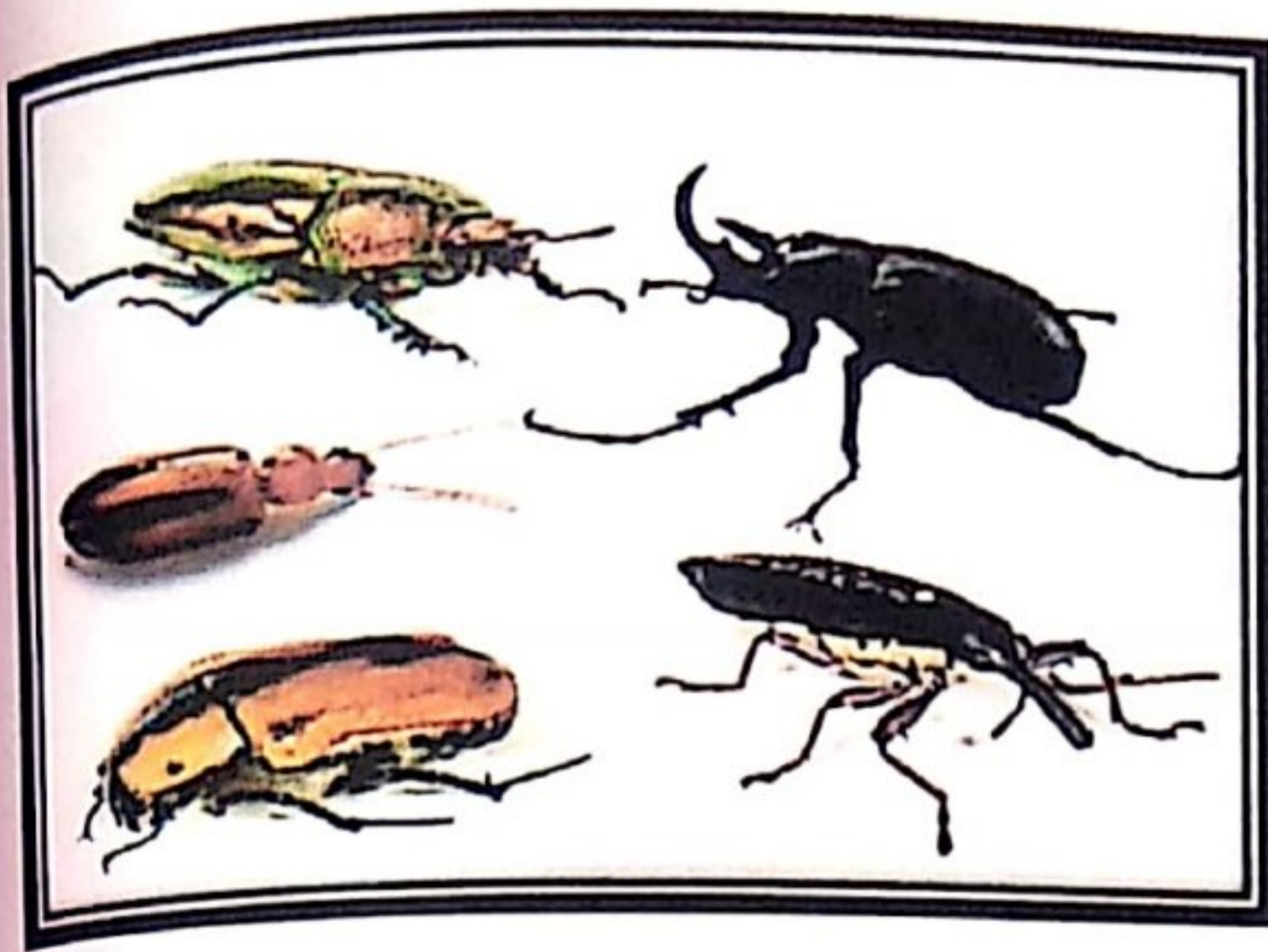
HONEY BEE

Both in complexity of behaviour and learning capacity, solitary wasps and bees are the equals of social wasps or Honeybees. Social insects, however, have developed a division of labour in which the members must do the work required at the proper time. If the society is to succeed, its needs must be communicated to the individual members, and those individuals must act accordingly. These needs may be met by a temporary change in the behaviour of existing individuals, or they may result in developmental changes that vary the number of individuals in the various castes (e.g., new queens, males, workers, or soldiers). Commonly, both behavioral and developmental changes are initiated by pheromones, chemical messengers that convey information from one member of a colony to another.

Insect societies are gigantic families, with all individuals being the offspring of a single female. In the honeybee the single queen in the hive secretes a pheromone known as the queen substance (oxodecenoic acid), which is taken up by the workers and passed throughout the colony by food sharing. So long as the queen substance is present, all members are informed that the queen is healthy. If the workers are deprived of queen substance, they proceed at once to build queen cells and feed the young larvae with a special salivary secretion known as royal jelly that results in the production of new queens.

All termites and ants and some species of wasps and bees are the only insect groups containing truly social species..

BEETLE.



Scientific Classification

Kingdom : *Animalia*
Phylum : *Arthropoda*
Class : *Insecta*
Order : *Coleoptera*
Family : *Carabidae*
Genus : *Brachinus*
Species : *Brachinus tenuicollis bombardier.*

Beetles typically have a particularly hard exoskeleton including the elytra, though some such as the rove beetles have very short elytra while blister beetles have softer elytra. The general anatomy of a beetle is quite uniform and typical of insects, although there are several examples of novelty, such as adaptations in water beetles which trap air bubbles under the elytra for use while diving. Beetles are endopterygotes, which means that they undergo complete metamorphosis, with a series of conspicuous and relatively abrupt changes in body structure between hatching and becoming adult after a relatively immobile pupal stage. Some, such as stag beetles, have a marked sexual dimorphism, the males possessing enormously enlarged mandibles which they use to fight other males. Many beetles are aposematic, with bright colors and patterns warning of their toxicity, while others are harmless Batesian mimics of such insects. Many beetles, including those that live in sandy places, have effective camouflage.

Beetles are prominent in human culture, from the sacred scarabs of ancient Egypt to beetlewing art and use as pets or fighting insects for entertainment and gambling. Many beetle groups are brightly and attractively colored making them objects of collection and decorative displays. Over 300 species are used as food, mostly as larvae; species widely consumed include mealworms and rhinoceros beetle larvae. However, the major impact of beetles on human life is as agricultural, forestry, and horticultural pests. Serious pests include the boll

weevil of cotton, the Colorado potato beetle, the coconut hispine beetle, and the mountain pine beetle. Most beetles, however, do not cause economic damage and many, such as the lady beetles and dung beetles are beneficial by helping to control insect pests.



V M K S R VASTRAD ARTS, SCIENCE,
V S BELLIHAL COMMERCE
COLLEGE HUNGUND
PROJECT REPORT

College roll no: 66 65

Examination seat no: S1937015

CERTIFICATE

This is to certify that Miss: bhagyashree sajjan of Bsc 6th semester has satisfactory completed the project report in zoology subject as prescribed by Rani Chennamma University Belagavi.

During year 2021-2022

Examiner:

Amala
6/9/22

[Signature]
Head Dept of Zoology

V. M. S. R. Vastrad Arts, Science and
V. M. Commerce College,
HUNGUND, Distt. Basalkot

[Signature]

DEFINITION: Poultry is defined as domestication of birds for obtaining their feathers, eggs, meat etc..

INTRODUCTION: These birds are most typically members of super-order Galloanserae (fowl), especially the order Galliformes (which includes chickens, quails, turkeys). Poultry science is study of practices & marketing of poultry & its products. It include breeding, nutrition, management, housing, disease control, marketing.

Mostly chickens are farmed in great numbers. More than 60 billion chickens are killed for consumption annually. Chickens raised for eggs are known as layers, while chickens raised for meat are called broilers.

Poultry birds classified on basis of

- 1) Utility
- 2) Economic value
- 3) Purpose & these include ; meat type, egg type, dual purpose, game, ornamental etc.

Birds of distinct type & color patterns admitted to standard are termed as "Standard breed"

BIRD	WILD ANCESTOR	DOMESTICATION	UTILIZATION
------	---------------	---------------	-------------

Chicken	Red jungelfowl	Southeast Asia	Eggs & Meat
Turkey	Wild turkey	Mexico	Meat
Duck	Mallard	Various	Meat
Goose	Greylag	Various	Eggs & meat
Guinea Fowl	Helmeted Guinea fowl	Africa	Eggs & Meat
Pigeon	Rock dove	Middle east	Meat

They are further classified into 4 types namely Class, Breed, Variety, Strain.

Class: It is used to designate a group of breed which have been developed in certain regions or geographical areas. Ex; Asia, England, America.

Breed: It is used to establish group of birds having same bony shape, weight, some common characteristics.

Variety: It represents sub-division of breed, distinguished either by color patterns, shape, and comb type or feather pattern.

TYPES OF CHICKEN BREEDS

There are more than 100 breeds. The commonly farmed chicken breeds are categorized into 5 based on purpose for which it is farmed. They are namely Egg layers, Boiler type, Dual type, Games & Ornamental types

1) Egg Layers: These are farmed mainly for the production of egg.

i) Leghorn: This is most popular commercial breed in india & originated from Italy. They are small, compact with single comb & wattles with white, brown/black color. They mature early & begin to lay eggs at age of 5/6 months. Hence these are preferred in commercial farms. They can also thrive well in dry areas.

ii) Chittagong: It is breed chiefly found in west Bengal. They are golden /light yellow colored. The beak is long & yellow in color. Ear lobes & wattles are small & red in color. They are good egg layers & are delicious.

2) Broiler type: These are well known for fast growth & soft quality meat.

i) White Plymouth rock: They have white plumage throughout the body. It is commonly used in broiler production. This is an American breed. It is fast growing breed & well suitable for growing intensively in confined farms.

3) Dual purpose breeds: These are for both meat &

egg production purpose.

i) *Brahma*: It is breed popularly known for its massive body having heavy bones, well feathered & proportionate body. Pea comb is one of the important breed characters. It has 2 common varieties namely; Light Brahma, Dark Brahma.

4) Game breeds: Since ancient times, special breed of roosters have been used for sport of cockfighting.

i) *Aseel*: This breed is white/black in color. Hens are not good egg layers but are good in incubation of eggs. It is found in all states of India. Aseel is noted for its pugnacity, high stamina, & majestic gait & dogged fighting qualities. Although poor in productivity, this breed is well known for their meat qualities.

5) Ornamental breeds: Ornamental chicken are reared as pets in addition to their use for egg production & meat.

i) *Silkie*: It is breed of chicken has a typical fluffy plumage, which is said to feel like silk & satin. The breed has numerous additional special characters, such as black skin & bones, blue earlobes, & five toes on each foot, while the majority chickens only have

four. They are exhibited in poultry shows, & come out in various colors. Silkies are well recognized for their calm, friendly temperament. Silkie chicken is especially simple to maintain as pets.

WORLD CHICKEN POPULATION

The food & agriculture organization of the united nations estimated that in 2002 there were nearly 16 billion chickens in the world. In 2008 top countries with highest number of chickens in world was led by china with largest at approximate 4.6 billion, followed by USA with approximate 2 billion & then followed by Indonesia, brazil, mexico. In 2019 china had over 5.14 billion chickens, higher amount than any other country in world, followed by Indonesia with approximate 3.7 billion chickens. The countries with next highest amount were USA, Brazil, Pakistan, Iran, India, Mexico, Russia & Myanmar.

Cross breed poultry evolved from ICAR

- *Vanaraja*
- *Giriraja*

VANaRAJA: Vanaraja is crossbreed of chicken in India. Vanaraja male line is red colored meat type breed & was developed from strain(IC-3) of red Cornish breed. Vanaraja female line has been

developed from colored synthetic broiler control & being selected for egg production to 40 weeks of age for last eight generations.



Vanaraja

GIRIRAJA: It is breed of chicken developed by Karnataka veterinary university in Bellary, India. It is cross breed of desi breed poultry & white leghorn. Giriraja females lay a large number of eggs, 130-150 per year, with each egg weighing 52-55grams.their shells

are brown in color & thicker than that of other commercial eggs, & resist breaking.



GIRIRAJA

Poultry by products

The feathers of poultry birds are used for making pillows, quilts. Droppings of poultry can be used as manure in field. The droppings are rich in nitrogen, potash and phosphates.

A number of poultry by products like blood meal, feather meal, poultry by- products meal & hatchery by -product meal are used as good sources of nutrients for meat producing animals & poultry. These byproducts supply proteins, fats, vitamins & good amount of minerals.

POULTRY HOUSING

Poultry production system should provide fresh air, clean feed & water, protection against predators,

shelter from cold, rain, wind sun & excessive heat; as well as source of heat when birds are young.

Basically, the birds need to be able to grow, sleep & lay eggs in comfort. The birds should also be free from stress & disease.

The basic requirements for poultry housing are:

- 1) Protection from weather*
- 2) Protection from predators*
- 3) Enough space*
- 4) Adequate ventilation*
- 5) A clean environment*
- 6) Access to dust bathing facilities*

System of poultry housing:

1) Deep litter system : Birds are fully confined within a house (3-4birds /m²) but can move around freely. The floor is covered with deep litter(5-10cm deep layer)of grain husks (maize/rice), straw, wood shavings or similarly absorbent, non toxic material.

The fully enclosed system protects the birds from thieves & predators & is suitable for specially selected commercial breeds of egg or meat

producing poultry(layers, breeder flocks, & broilers)

2) Slatted floor systems: Wire or wooden slatted floors are used instead of deep litter, which allow stocking rates to be increased to five birds/m² of floor space.

Birds have reduced contact with faeces & are allowed some freedom of movement. Faeces can be collected from below the slatted floor & used as fertilizer.

3) Battery cage system: This is usually used for laying birds, which are kept throughout their productive life in small cages. There is high initial capita investment, & system is mostly confined to large scale commercial egg layer operations.

Broiler Management of Poultry

- Since the broilers are being reared for meat it is important that they always have an adequate supply of high quality broiler feed.*
- As the birds get heavier they will need more floor space & ventilation*
- It may be well to use nightlights equivalent to 15 watts per 200square feet. This allows birds to eat at night & helps prevent piles-ups.*
- Keep litter dry to help prevent bried blisters.*

Provide ample cool & clean water.

Pullet management of poultry

- *Feed starter & grower feeds as outlined under feed & water section.*
- *Keep young & old birds separated. If it is necessary for one person to care for young & old birds care for young birds first each day.*
- *Remove any unthrifty pullets*
- *Keep birds free for parasites.*
- *Keep complete & accurate records.*

Layer management of poultry

- *Clean & disinfect laying house before placing pullets in it.*
- *If floor management is used, put in 4-6 inches of clean litter.*
- *House only well developed & well fleshed pullets.*
- *Use artificial light to provide 14hours of total light per day- 140watt bulb per 200 square feet, hung 8 feet above the floor.*
- *Use feeding program as outlined one.*
- *Keep birds free of parasites.*
- *Keep complete & accurate records.*
- *Remove obvious culls.*

Debeaking: It is cutting off part of the upper beak. It helps in preventing pecking injuries & cannibalism among chicks.

Incubation and hatching process of poultry

- *Hatching egg production & care: keep 1 male for each 10-12 females.*
- *Males should be kept with females' at least 1 week prior to saving hatching eggs to ensure high egg fertility.*
- *Feed a complete diet.*
- *Collect eggs at least 3times per day.*
- *The hatching of fertilized eggs requires about 21 days & hatching takes place at 38°C temperature.*

Brooding of poultry

The care & management of young chicks during early part of their life called brooding i.e. up to 3-4 weeks.

Brooders

- *Hoover Type: Follow manufacturer's direction. Starting temperature at edge of Hoover should be 95°F. For the 1st week & reduced 5°F each week.*
- *Heat lamp: Use either white or infra-red heat lamps.*
- *Homemade brooder: An inexpensive method of supplying heat to few chicks is to place a*

100watt light bulb inside a gallon tin can & place the can on the floor of brooder house.

Poultry disease & control

Poultry disease can be classified non-infectious & infectious disease.

Non-infectious disease can be faulty management, faulty feed preparation & inadequate diet/nutritionally efficient disease.

Infectious disease can be viral, bacterial, fungal & tend to be most common since they spread from bird to bird. Affects to birds intestinal, nervous, immune, respiratory/reproductive as well as their skin.

Common disease in chicken

1)Fowl pox:

Symptoms- Fowl pox come in 2 form namely from wet & dry. In dry form unfeathered areas of bird will have wart like lesions that heal in 2 weeks. In wet form lesions appearing around the mouth & discharge from you're birds eyes.

Control- There is no treatment for fowl pox but it will go within 2 weeks but should take care about

it. There are special vaccinations, if any bird show sign of infection make them quarantine, also control mosquitoes in chicken enclosure since they are transmit from flock to flock.

2)Coccidiosis:

Symptoms- when you're chicken loose droppings, its lightly have coccidiosis. Parasite that damage gut wall of chicken. You may also notice diarrhoea, weight loss, ruffled feathers in chicken.

Control- Treat with antibiotics. Keeping food areas, brooders, & coops clean & dry. Using medicated starter feed for your unvaccinated chicks.

3) Infectious bronchitis:

Symptoms: chickens get cold it's just as contagious. If the flock become infected, it noticed that egg production will drop the consumption of food & water will decline. They may be discharge watery mucus from bird's eyes & nostrils.

Control: You can give antibiotics for few days. And there is vaccination as like fowl pox disease. Having a good bio security method in place as well as adequate rodent control should help keep disease

minimum.

Benefits of poultry

- *It doesn't require high capital for construction & maintenance of poultry farming.*
- *It doesn't require a big space*
- *It ensures high return of investment within a very short period of time.*
- *Feathers in poultry are used for making pillows, fancy articles & curios.*
- *It offers good full time & part time employment opportunity to farmers.*
- *A poultry dropping that is wastes are nitrogenous & considered good for fertilizers.*
- *It provides fresh & nutritious food & has huge global demand.*

Conclusions: *Poultry farming is the easiest establishing & profitable business worldwide. If we think of the protein source which is much need for human body, poultry farming is continent & cost effect source of protein since ancient period.*



**V.M.K.S.R.VASTRADARTS, SCIENCE,&
V.S.BELLIHAL COMMERCE COLLEGE HUNGUND.
PROJECTREPORT**

College Roll No:

Examination seat No: S2041671

CERTIFICATE

This is to certify that Mr./Miss: Shilpa Waddar of B.Sc 6th semester has satisfactorily completed the project on local biodiversity in Zoology subject as prescribed by the Rani Chennamma University Belagavi.

During year 2022-2023

Examiner:

1).

2).
12/9/23

Valued

12/9/23

HOD

Head of the Department of
ZOOLOGY.
V.M.K.S.R. Vastrad Arts, Science and
V.S. Bellihal Commerce College
HUNGUND. Dist: Bellari

V. M. K. S. R Vastrad Art's, science and V. S. Bellihal Commerce College, Hungund.

Report on field visit for VI th B. Sc. Zoology students

Submitted to the principal

Excursion incharge: Asst.Prof Nayana Mara

Staff Accompanied for the study tour: Asst. Prof Neelaveni N Sobarad

Attender: Mrs. S. Hiremath

No. Of students : 28

Objective of the visit: to study the local biodiversity.

Purpose of the tour:

- Biodiversity is essential for the process that support all life on earth, including humans
- It serves as nature reserve for the conservative of natural heritage of the city. It enhance the quality of urban environment.

Proposed Research Work

PROJECT TITLE :

“ PROJECT ON LOCAL BIODIVERSITY “

INTRODUCTION :

Hungund taluka is located in the Eastern part of Bagalkot district. It lies between 15° - 52° & 16° - 16° north latitudes 75° - 50° to 75° - 20° east longitude. The taluk has Muddebihal taluka Bijapur district on the north. Raichur district on the east Kushtagi taluka of Koppal district to the south Bagalkot tq on the north west, Channarayana tq south west & Ron tq of Gadag district on south east. It has an area of 135 sq Kms, with a population of 2.88 lakhs as per 2011 census. The density of population is 181 per sq km. Taluka gets an average rainfall of 597 mm per year. The taluka touches Malaprabha river on south & Krishna on the northern boundary. Krishna & Malaprabha meet at famous historical place Kudalsangam, Channarayana tq. Malaprabha is a seasonal river, going dry in winter & summer months. Whereas Krishna is perennial. These rivers irrigate an area of approximately 7439 ha. The total irrigated land is 15 ha of which 800 ha is irrigated by Bore well & open wells. 7.2% of the land is under forest & 1.8% land is uncultivable land.

Major crops in Hungund tq are Jowar. Bajra & in the kharif, wheat, sunflower, cotton in The Rabi. In spite of two rivers, the taluka has not used irrigation to the fullest extent.

Recently sugar cane is being grown in small patches. Poultry is concentrated near Gudur, mainly in egg production units.

Hungund is included in the list of "more back ward" taluk of Bagalkot district. Majority units are concentrated near Ilkal. They are in the area of pink granite mining and cutting & polishing.

Demographics

As of 2001 India census, Hunagund had a population of 18,035.

Males constitute 51% of the population and females 49%. Hungund has an average literacy rate of 64% higher than the national average of 13% of the population is under 6 year of age. Kannada is the most widely spoken language in the taluk

Economy

Agriculture is the largest employer in Hungund. The chief crops cultivated are rabi and jowar, as well as groundnut, gram tuvar daal and moong daal. Ilkal is famous for Ilkal saree and Red Granite.

Education

Hungund and Ilkal have some of the most famous educational institutions in the region. Vijay Mahanntesh high school in Hungund was established in 1915 as Anglo Vernacular School. Hungund also has a Rural Polytechnic college

Industry:

The people from are very industrious and are backed by good background of business. The main source of income is the Granite

business and weaving is a wide spread occupation. The agricultural land is not arable and it faces the threat of pollution because of the granite activities involved and water shortage. Hence forth the agriculture provides a very little employment opportunity to the locals' .jowar, sunflowers are the major crops grown here and agriculture is rain dependent.

The granite brings in a lot of revenue and the business is well established. The quarries and mines nearby are excavated for the raw stone processed and polished and marketed. It is an important export commodity from the place and town has welcomed immense urbanities from the states as far as Rajasthan an Orissa.

The nearby villager and other have widely benefited and affluence and it is main employment for the people of the regions. The important products are Ruby Red, Ilkal chocolate, Cats eye & Mudagal grey.



Scientific name: *Pavo cristatus*

Mass: 4 – 6 kg (Male, Adult), 2.8 – 4 kg (Female, Adult)

Domain: Eukaryota

Family: Phasianidae

Kingdom: Animalia

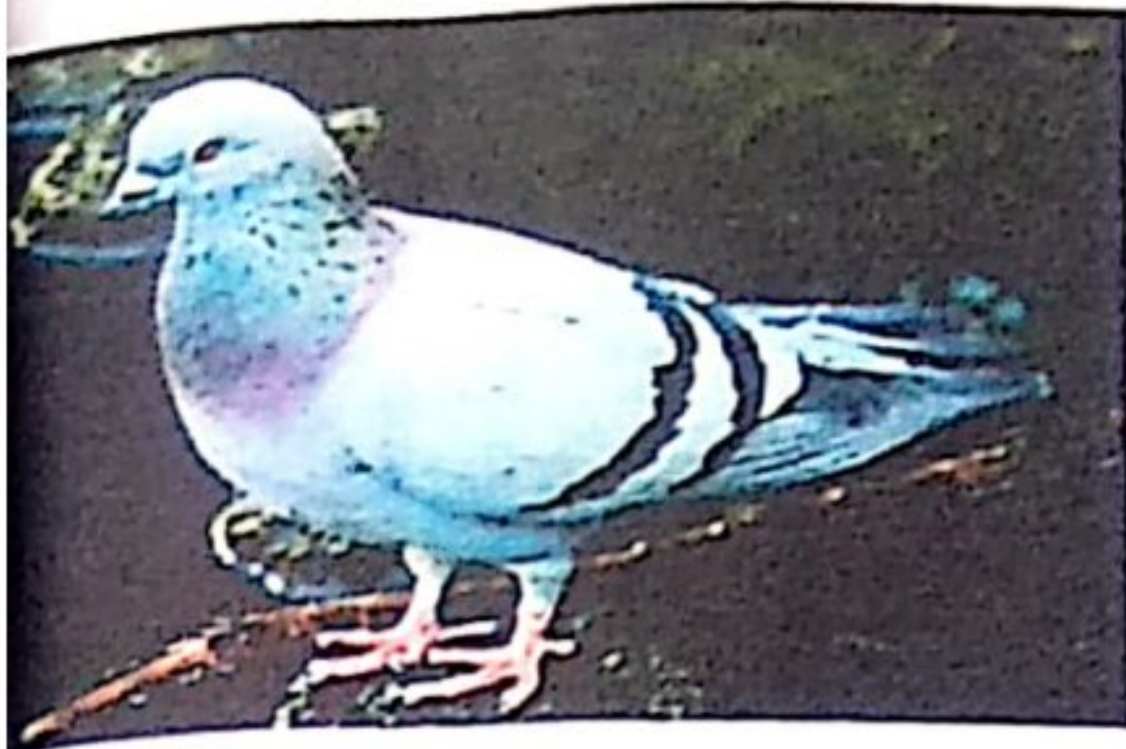
Order: Galliformes

The Peacock or the common Peafowl, is the gorgeous bird of India. It is called 'Mayura' in Sanskrit, 'More' in Tamil and Malayalam, 'Nemali' in Telugu and 'Navilu' in Kannada. Its ornithological, and feeding on insects, lizards and snakes apart from grain and vegetable shoots. It is a bird to which a great deal of religious significance is attached in our culture. It is closely associated with Subramanya or Kathikeya, who is the commander in chief of the celestial forces – Deva Seanpati. Kathikeya is not just a war lord. In the famous Kathikeya temple at Sandur. The deity is in the form of a celibate or Bhahamachari. But further South in Tamilnadu the same god, who is popularly known as Murugan, has two consorts, Valli and Devayani.

Let us look at the behavior of the peacock in nature. It is normally found in the world with the four and five peahens, which constitute his entourage, his instinctive following in the right season. The females are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which is such distinctive features of the male in full plume. The peacock is a shy bird and does not even take chase his own idea of courtship. In the spring season when nature is green and beautiful, it chooses an open area in the lush undergrowth to indulge in his grand courtship display with dignified patience and intensity.

The spot is a vantage point where he can see the females, and more importantly the female in his orbit can see him.

Pigeons and Doves



Classification

- ▶ Kingdom: Animalia
- ▶ Phylum: Chordata
- ▶ Class: Aves
- ▶ Order: Columbiformes
- ▶ Family: Columbidae
- ▶ Genus: *Columba*
- ▶ Species: *Columba livia*



Zoological Classification

▶ Kingdom:	Animalia
▶ Phylum:	Chordata
▶ Subphylum:	Vertebrata
▶ Class:	Aves
▶ Order:	Columbiformes
▶ Species:	Columbidae

Pigeons and doves exhibit considerable variation in size, ranging in length from 15 to 75 centimeters (5.9 to 29.5 in), and in weight from 30 g (0.066 lb) to above 2,000 g (4.4 lb). The largest species is the crowned pigeon of New Guinea, which is nearly turkey-sized, at a weight of 2-4 kg (4.4-8.8 lb). The smallest is the world ground dove of the genus *Columbina*, which is the same size as a house sparrow, weighing as little as 22 g (0.049 lb). With a total length of more than 50 cm (20 in) and weight of almost 1 kg (2.2 lb), the largest arboreal species is the Marquesan imperial pigeon, while the dwarf fruit dove, which may measure as little as 13 cm (5.1 in), has a marginally smaller total length than any other species from this family.

Generally, the Columbidae tend to have short legs, short bills with a fleshy cere, and small heads on large, compact bodies. In a series of experiments in 1975 by Dr. Mark B. Friedman, using foves, their characteristic head bobbing was shown to be due to their natural desire to keep their vision constant. It was shown yet again in a 1978 experiment by Dr. Barrie J. Frost, in which pigeons were placed on treadmills; they could have eleven primary feathers, and low wing loading; pigeons have strong wing muscles (wing muscles comprise 31-44% of their body weight and are among the strongest fliers of all birds. They are also highly manoeuvrable in flight.

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In addition to fruit and seeds, a number of other food items are taken by many species. Some, particularly ground doves and quail-doves, eat a large number of prey items such as insects and worms. One species, the atoll fruit dove, is specialized in taking insect and reptile prey. Snails, moths, and other insects are taken by white-crowned pigeons, orange fruit doves, and ruddy ground doves.

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CAL FAUNA : BIRDS

DWS :



classification of the

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Facts about Crows

Following are some of the amazing facts about crows.

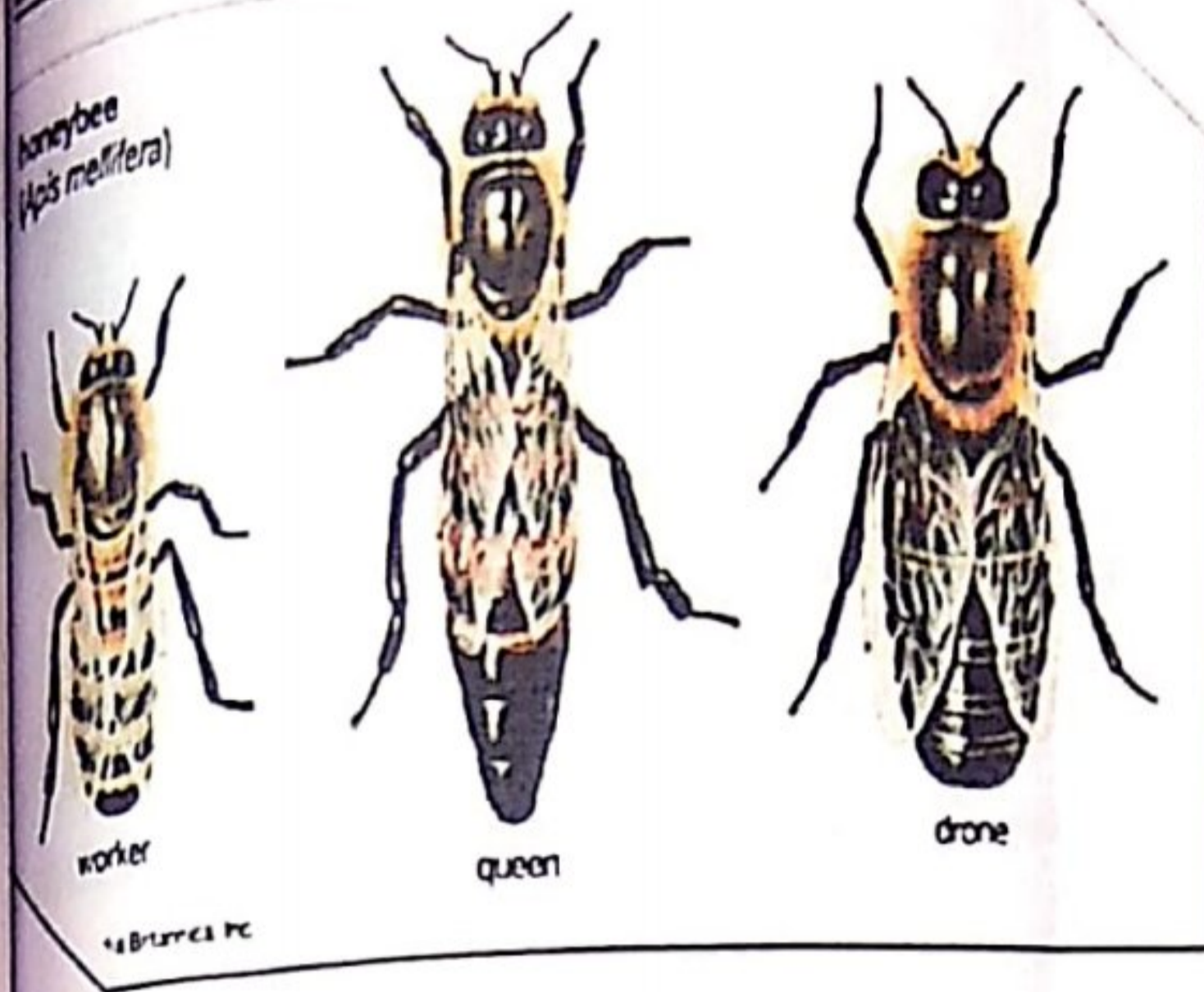
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- Their fore brain is more developed and complex as compared to that of all other birds.
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What do Crows Eat

You will be surprised to find out what do crows eat. As they are omnivores, their diet is not limited to grains and plants. In fact, they also feed on meat. Their strong beaks help them search for and catch insects. Among crows, corn is their favorite. They may pick food from the nests of other birds. They also feed on eggs and young birds when found in nests unattended by their parents. On the other hand, their diet also includes small insects. This makes them very useful for farmers as they often feed on pests found in fields. These include grasshoppers, cutworms and wireworms. In addition, they also remove certain weeds growing in farms. They can also be found rummaging around for their food in garbage cans. They may use their own tools for carrying out this search.

INSECTS



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Phylum : Arthropoda

Class : Insecta

Order : Hymenoptera

Family : Apidae

Genus : Apis

Species : A. mellifera

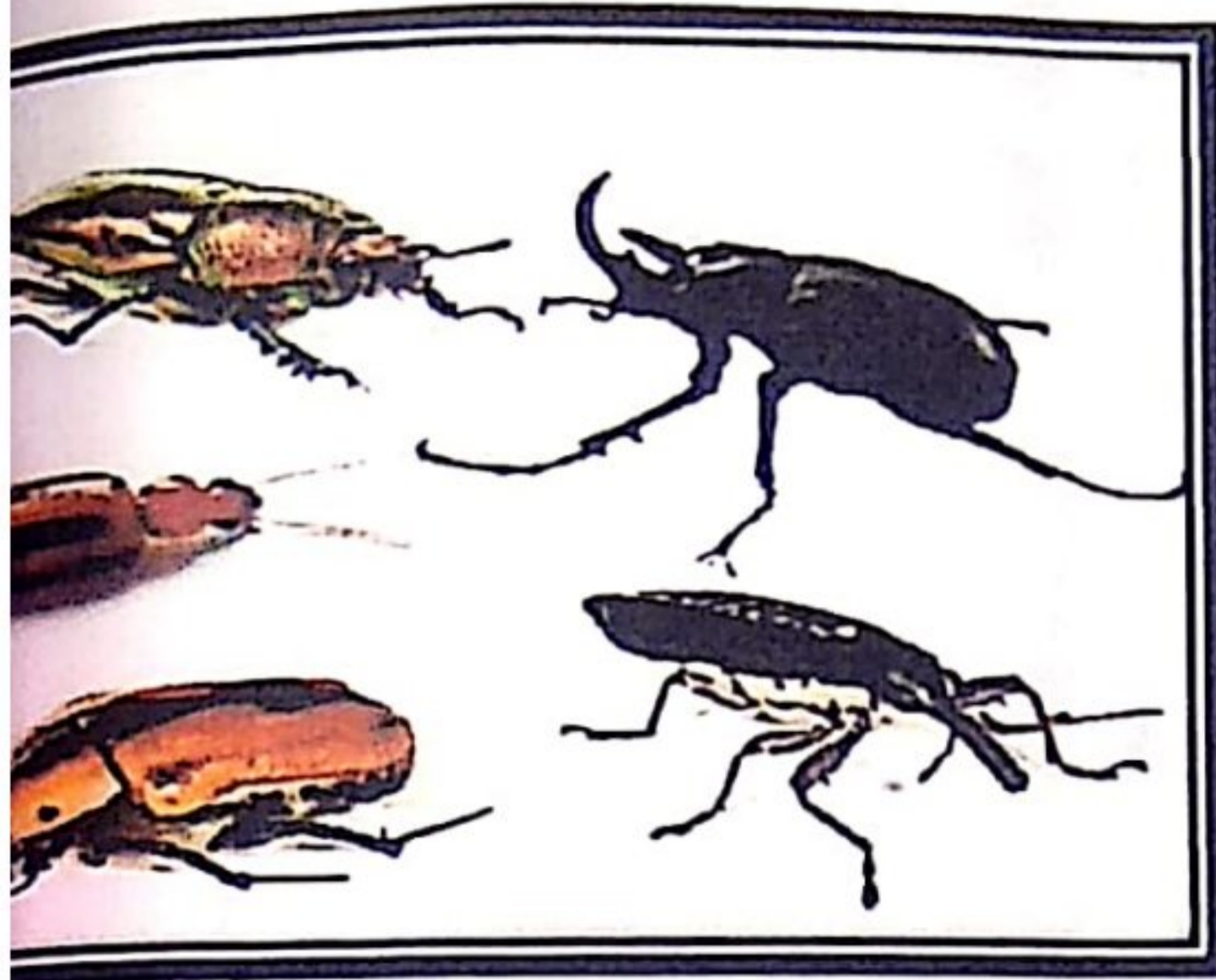
HONEY BEE

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All termites and ants and some species of wasps and bees are the only insect groups containing truly social species..

BEETLE.



Scientific Classification

Kingdom	: Animalia
Phylum	: Arthropoda
Class	: Insecta
Order	: Coleoptera
Family	: Carabidae
Genus	: Brachinus
Species	: Brachinus tenuicollis bombardier.

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V.M.K.S.R. VASTRAD ARTS, SCIENCE, &
V.S. BELLIHAL COMMERCE COLLEGE HUNGUND.

PROJECT REPORT

College Roll No: 19.

Examination seat No: S2041650.

CERTIFICATE

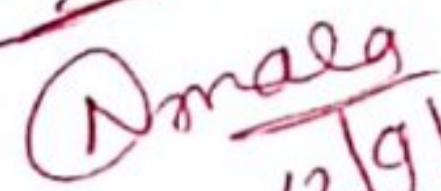
This is to certify that **Miss: Pooja Ballari** of B.Sc 6th semester has satisfactorily completed the project on local biodiversity in Zoology subject as prescribed by the Rani Chennammna University Belagavi.

During year 2022-2023.

Examiner:

1). 

2). 

Valued

12/9/23


HOD 31/8/23

Head of the Department of
ZOOLOGY.
V.M.S.R. Vastrad Arts, Science and
V.S. Bellihal Commerce College
HUNGUND. Dist: Bellarykot

V. M. K. S. R Vastrad Art's, Science and V. S. Bellihal Commerce College, Hungund.

Report on field visit for VI th B. Sc. Zoology students

Submitted to the principal

Excursionincharge: Asst.Prof Nayana Mara

Staff Accompanied for the study tour: Asst. Prof. Neelaveni N Sobarad

Attender: Mrs. S. Hiremath

No. Of students : 28

Objective of the visit: to study the local biodiversity.

Purpose of the tour:

- Biodiversity is essential for the process that support all life on earth, including humans
- It serves as nature reserve for the conservative of natural heritage of the city. It enhance the quality of urban environment.

Proposed Research Work

PROJECT TITLE :

“ PROJECT ON LOCAL BIODIVERSITY “

INTRODUCTION :

Hungund taluka is located in the Eastern part of Bagalkot district. It lies between 15° - 52° & 16° - 16° north latitude and 75° - 50° to 75° - 20° east longitude. The taluk has Muddebihal taluk of Bijapur district on the north. Raichur district on the east Kushtagi tq of Koppal district to the south Bagalkot tq on the north west & Badami tq south west & Ron tq of Gadag district on south east. It has an area of 135 sq Kms, with a population of 2.88 lakhs as per 2011 census. The density of population is 181 per sq km. Taluka gets an average rainfall of 597 mm per year. The taluka touches Malaprabha river on south & Krishna on the northern boundary. Krishna & Malaprabha meet at famous historical place Kudalsangam, of Hungund tq. Malaprabha is a seasonal river, going dry in winter & summer months. Whereas Krishna is perennial. These rivers irrigate an area of approximately 7439 ha. The total irrigated land is 8615 ha of which 800 ha is irrigated by Bore well & open wells. 7.2% of the land is under forest & 1.8% land is uncultivable land.

Major crops in Hungund tq are Jowar. Bajra & in the Kharif, wheat, sunflower, cotton in The Rabi. In spite of two rivers, the taluka has not used irrigation to the fullest extent.

Recently sugar cane is being grown in small patches. Poultry is concentrated near Gudur, mainly in egg production units.

Hungund is included in the list of "more back ward" taluk of Bagalkot district. Majority units are concentrated near Ilkal. They are in the area of pink granite mining and cutting & polishing.

Demographics

As of 2001 India census, Hunagund had a population of 18,035.

Males constitute 51% of the population and females 49%. Hungund has an average literacy rate of 64% higher than the national average of 13% of the population is under 6 year of age. Kannada is the most widely spoken language in the taluk

Economy

Agriculture is the largest employer in Hungund. The chief crops cultivated are rabi and jowar, as well as groundnut, gram tuvar daal and moong daal. Ilkal is famous for Ilkal saree and Red Granite.

Education

Hungund and Ilkal have some of the most famous educational institutions in the region. Vijay Mahanntesh high school in Hungund was established in 1915 as Anglo Vernacular School. Hungund also has a Rural Polytechnic college

Industry:

The people from are very industrious and are backed by good background of business. The main source of income is the Granite

business and weaving is a wide spread occupation. The agricultural land is not arable and it faces the threat of pollution because of the granite activities involved and water shortage. Hence forth the agriculture provides a very little employment opportunity to the locals' .jowar, sunflowers are the major crops grown here and agriculture is rain dependent.

The granite brings in a lot of revenue and the business is well established. The quarries and mines nearby are excavated for the raw stone processed and polished and marketed. It is an important export commodity from the place and town has welcomed immense urbanities from the states as far as Rajasthan an Orissa.

The nearby villager and other have widely benefited and affluence and it is main employment for the people of the regions. The important products are Ruby Red, Ilkal chocolate, Cats eye & Mudagal grey.

PEACOCK:



Scientific name: *Pavo cristatus*

Mass: 4 – 6 kg (Male, Adult), 2.8 – 4 kg (Female, Adult)

Domain: Eukaryota

Family: Phasianidae

Kingdom: Animalia

Order: Galliformes

The Peacock or the common Peafowl, is the gorgeous bird of India. It is called 'Mayura' in Sanskrit, 'More' in Tamil and Malayalam, 'Nemali' in Telugu and 'Navilu' in Kannada. Its ornithological, and feeding on insects, lizards and snakes apart from grain and vegetable shoots. It is a bird to which a great deal of religious significance is attached in our culture. It is closely associated with Subramanya or Kathikeya, who is the commander in chief of the celestial forces – Deva Seanpati. Kathikeya is not just a war lord. In the famous Kathikeya temple at Sandur. The deity is in the form of a celibate or Bhahamachari. But further South in Tamilnadu the same god, who is popularly known as Murugan, has two consorts, Valli and Devayani.

Let us look at the behavior of the peacock in nature. It is normally found in the world with the four and five peahens, which constitute his entourage, his instinctive following in the right season. The females are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which is such distinctive features of the male in full plume. The peacock is a shy bird and does not even take chase his own idea of courtship. In the spring season when nature is green and beautiful, it chooses an open area in the lush undergrowth to indulge in his grand courtship display with dignified patience and intensity.


The spot is a vantage point where he can see the females, and more importantly the female in his orbit can see him.

Pigeons and Doves



Classification

- ▶ Kingdom: Animalia
- ▶ Phylum: Chordata
- ▶ Class: Aves
- ▶ Order: Columbiformes
- ▶ Family: Columbidae
- ▶ Genus: *Columba*
- ▶ Species: *Columba livia*



Zoological Classification

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▶ Phylum:	Chordata
▶ Subphylum:	Vertebrata
▶ Class:	Aves
▶ Order:	Columbiformes
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Pigeons and doves exhibit considerable variation in size, ranging in length from 15 to 75 centimeters (5.9 to 29.5 in), and in weight from 30 g (0.066 lb) to above 2,000 g (4.4 lb). The largest species is the crowned Pigeon of New Guinea, which is nearly turkey-sized, at a weight of 2-4 kg (4.4-8.8 lb). The smallest is the New world ground dove of the genus *Columbina*, which is the same size as a house sparrow, weighing as little as 22 g (0.049 lb). With a total length of more than 50 cm (20 in) and weight of almost 1 kg (2.2 lb), The largest arboreal species is the Marquesan imperial pigeon, while the dwarf fruit dove, which may measure as little as 13 cm (5.1 in), has a marginally smaller total length than any other species from this family.

Overall, the Columbidae tend to have short legs, short bills with a fleshy cere, and small heads on large, compact bodies. In a series of experiments in 1975 by Dr. Mark B. Friedman, using doves, their characteristic head bobbing was shown to be due to their natural desire to keep their vision constant. It was shown yet again in a 1978 experiment by Dr. Barrie J. Frost, in which pigeons were placed on treadmills; it and have eleven primary feathers, and low wing loading; pigeons have strong wing muscles (wing muscles comprise 31-44% of their body weight and are among the strongest fliers of all birds). They are also highly manoeuvrable in flight.

Seeds and fruit from the major component of the diets of pigeons and doves. In fact, the family can be divided into the seed-eating or granivorous species (subfamily Columbinae) and the fruit-and-must-eating or frugivorous species (the other four subfamilies). The granivorous species typically feed on seed found on the ground, whereas the frugivorous species tend to feed in trees. There are morphological adaptations that can be used to distinguish between the two groups: granivores tend to have thick walls in their gizzards, intestines, and esophagi whereas the frugivores tend to have thin walls. In addition, fruit-eating species have short intestines whereas those that eat seeds have longer ones. Frugivores are capable of clinging to branches and even hang upside down to reach fruit.

In addition to fruit and seeds, a number of other food items are taken by many species. Some, particularly the ground doves and quail-doves, eat a large number of prey items such as insects and worms. One species, the atoll fruit dove, is specialized in taking insect and reptile prey. Snails, moths, and other insects are taken by white-crowned pigeons, orange fruit doves, and ruddy ground doves.

Male pigeons are more opportunistic to mate with another female.

LOCAL FAUNA : BIRDS

CROWS :



classification of the

- Kingdom: Animalia
- Phylum: Chordata (with backbones)
- Class: Aves (birds)
- Order: Passeriformes (songbirds)
- Family: Corvidae (crows, jays)
- Genus: *Corvus*
- Species: *brachyrhynchos*

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All the species have the same appearance without much difference between the genders. They are entirely black in color while some possess slightly grey or white colored plumage. Their beaks and legs are strong while the overall body is stout.

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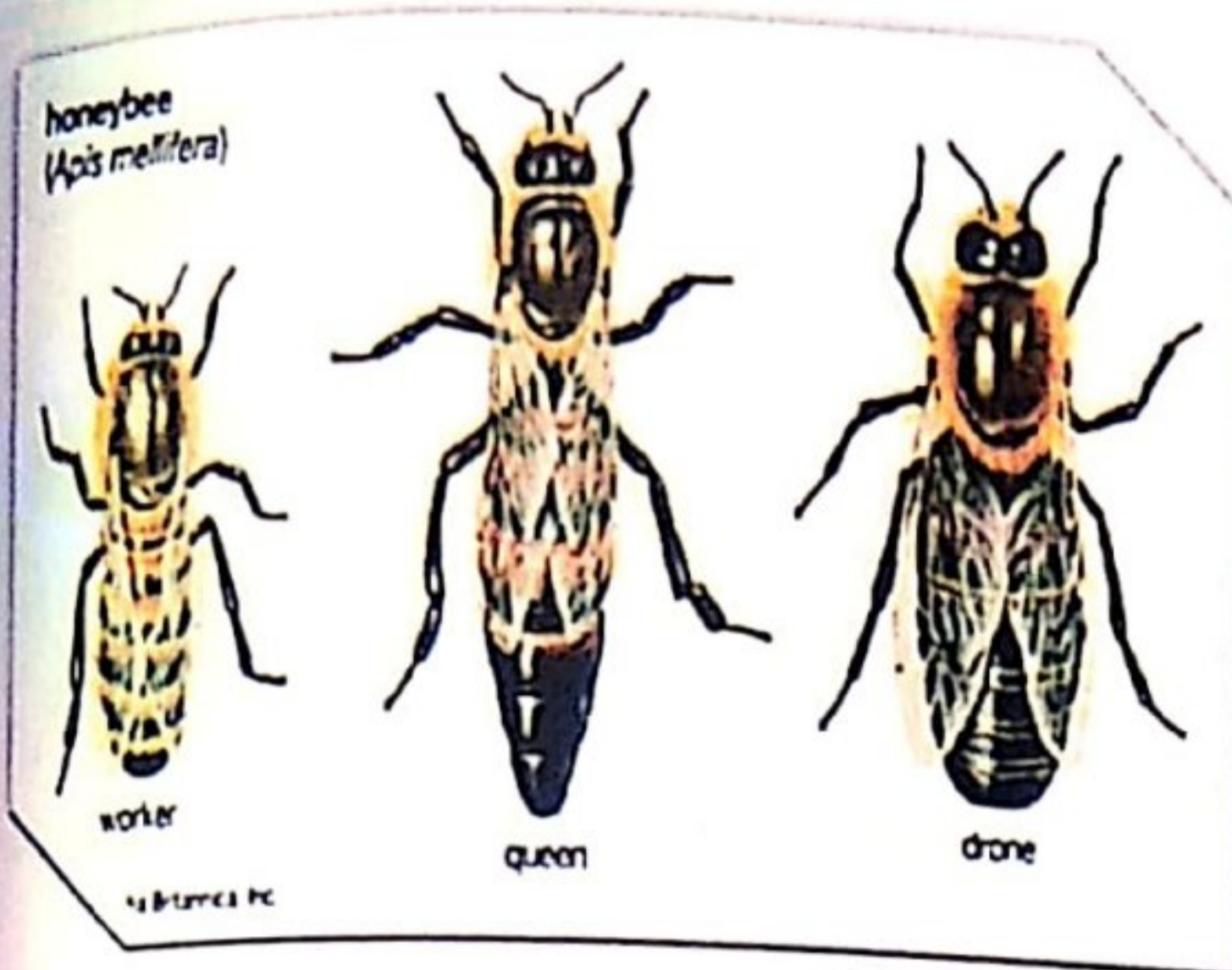
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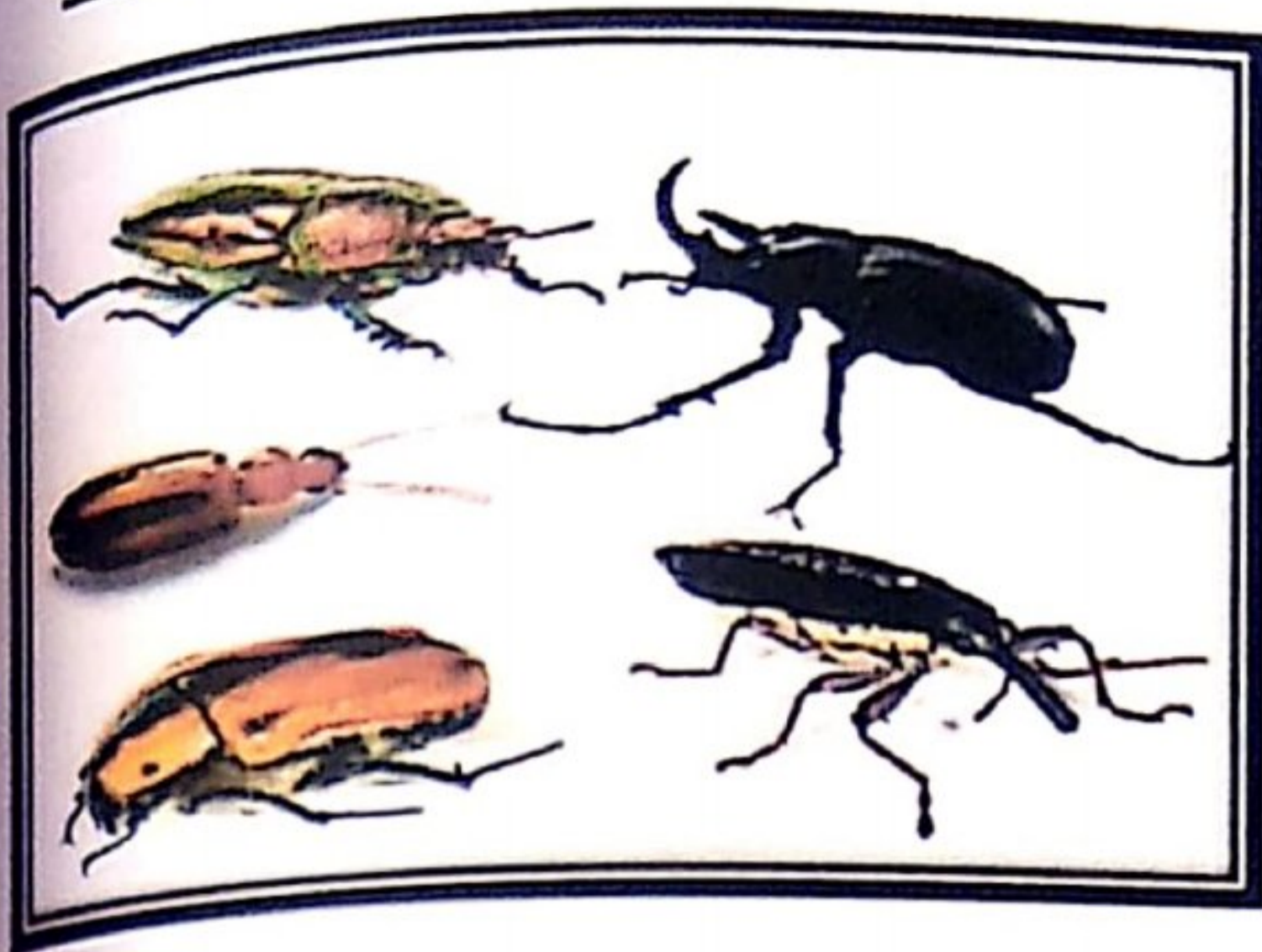
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