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).....

2).....

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:

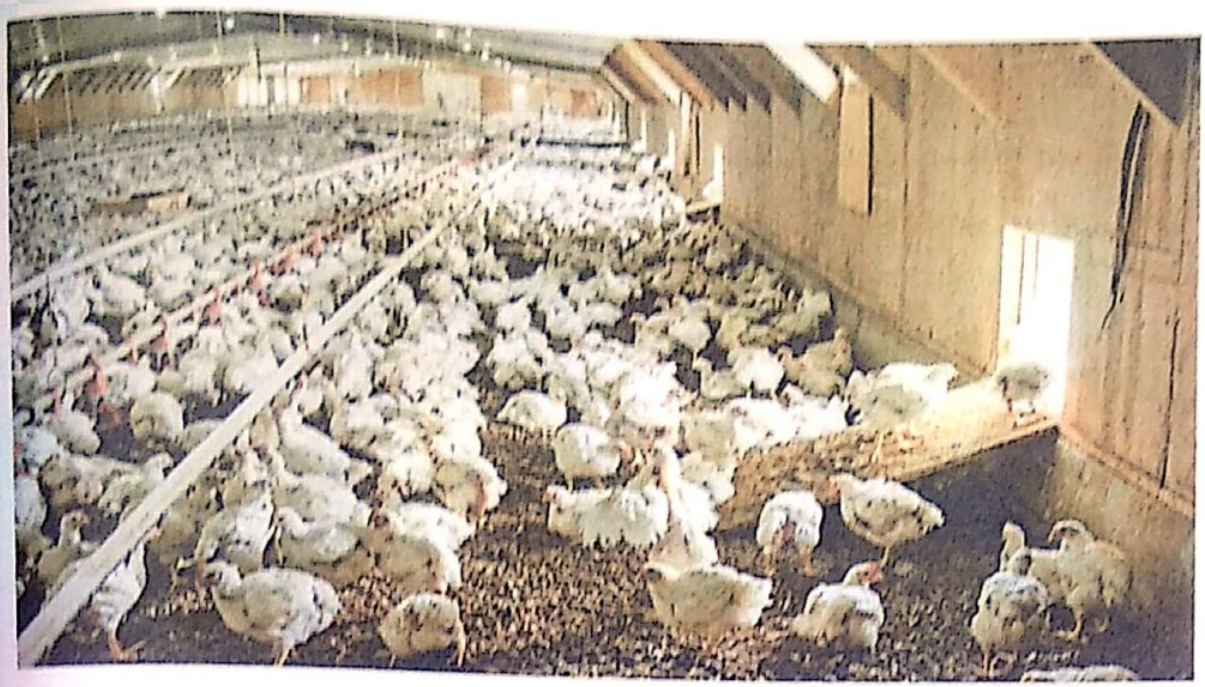
To study the Poultry unit,

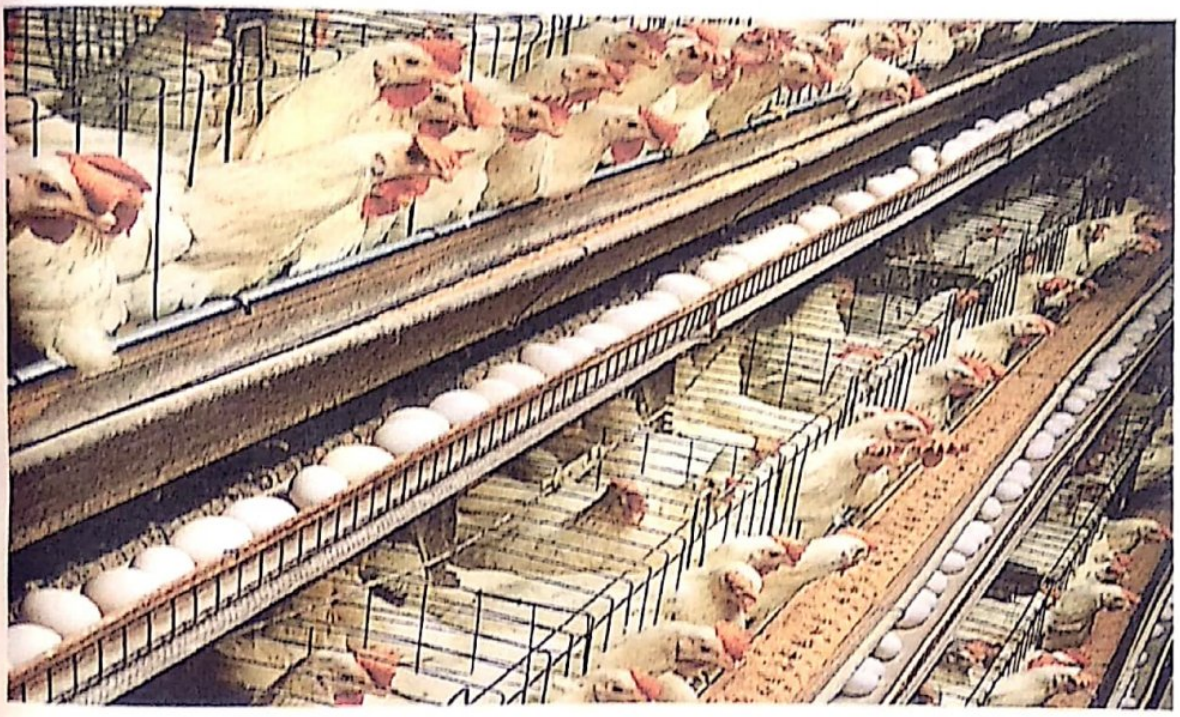
Equipments used in poultry,

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. Yamageri. 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).....

2).....

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

HOD

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:

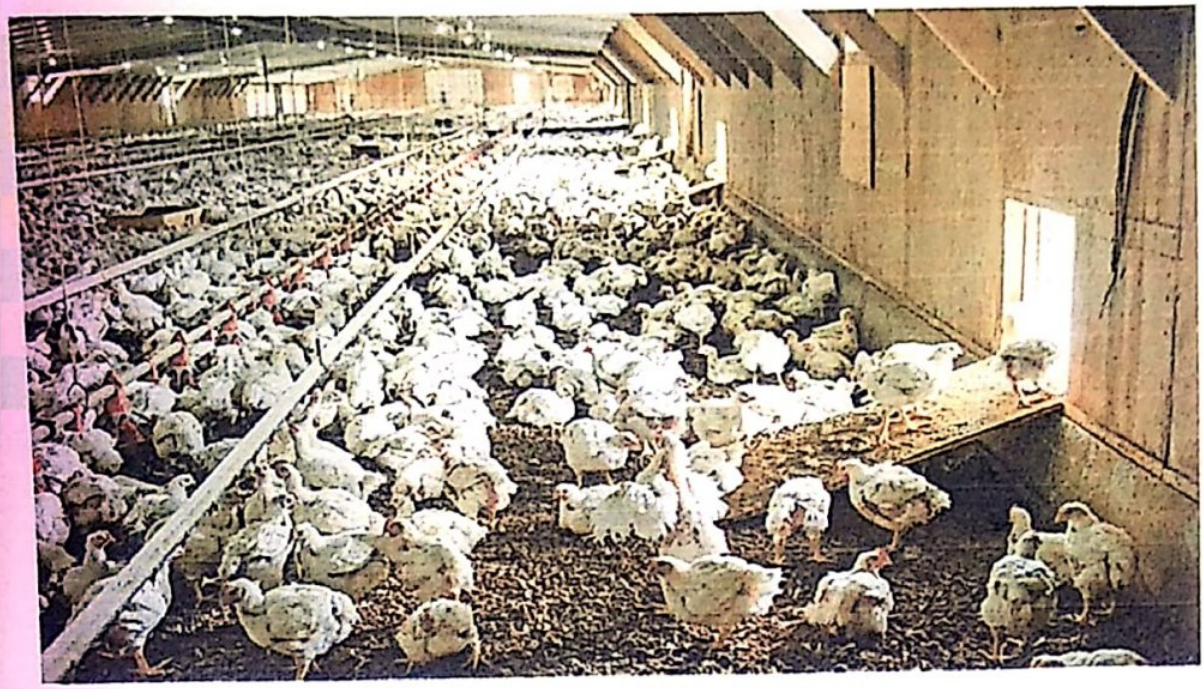
To study the Poultry unit,

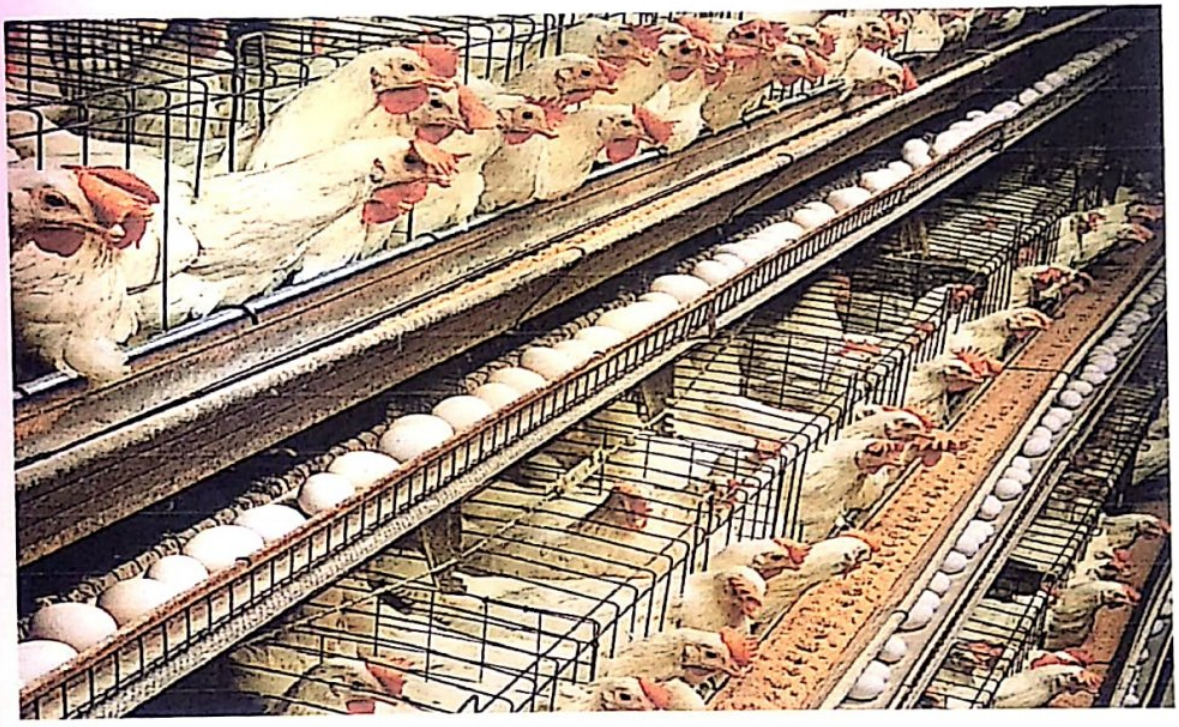
Equipments used in poultry,

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.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 Chennammna University Belagavi.

During year 2022-2023.

Examiner:

1). .....

2). .....
12/9/23

Valued
12/9/23

HOD

Proposed Research Work

PROJECT TITLE :

"PROJECT ON LOCAL BIODIVERSITY"

INTRODUCTION :

Hungund taluka is located in the Estern part of Bagalkot district. It lites between 15^0-52^0 & 16-16^0 north latitude ands 75-50^0 to 75-20^0 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. Where as 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. Inspite of two rivers, the taluka has not used irrigation to the fullest extent.

Scanned with OKEN Scanner

Recently sugar cane is being grown in small patches. Poultry is 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

Scanned with OKEN Scanner

Recently sugar cane is being grown in small patches. Poultry is 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

Scanned with OKEN Scanner

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.

Scanned with OKEN Scanner

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 Telgu and 'Navilu' in kannada . Its orni – thological, and feeding on insects, Lizards and sankes apart form 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 .

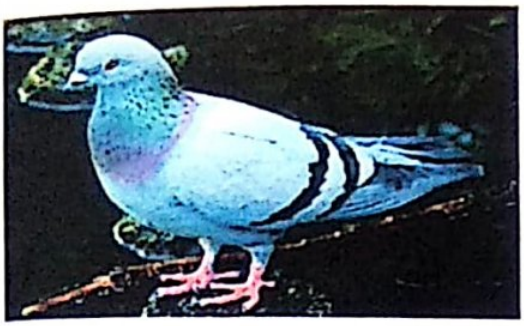
Kathikeya is not just a war lord. In the famous Kathikeya temple at Sandur. The deity is in the form of a celibrate or Bhahamachari. But further South in Tamilnadu The same god,who is popularity known as Murugan,has two is popularity known as Murugan,has two consorts, Valli and Devayani.

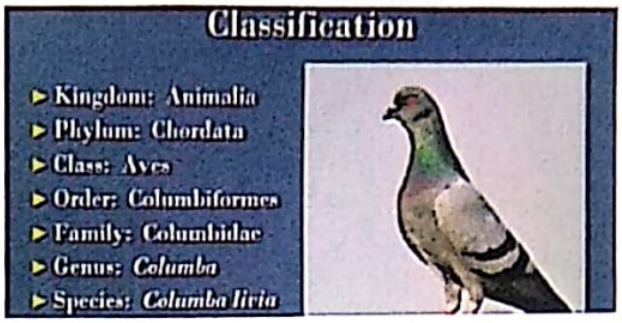
Let us look at the behavior of the peacock in the nature. It is normally in found In the world with the four and five peahens, which is condtitute his entourage, his Instincitive following in the right sesson. The female are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which Is such distinctive features of the male in full plume. The peacock is shy bird and doesnot 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 undergrow to induluge in his grand courtship display with dignified patience and intensity.

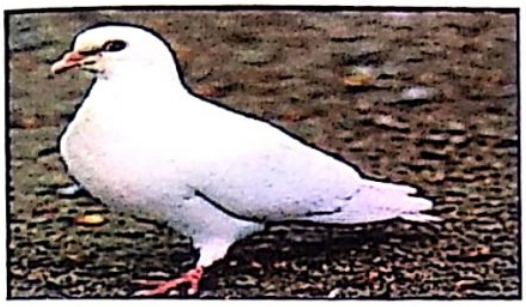
The spot is a ventage point where he can see the females, and more importantly the female in his orbit can see him.

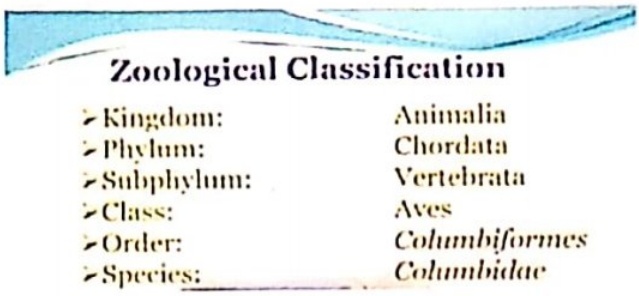
Scanned with OKEN Scanner

Pigeons and Doves









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 while-crowned, pigeons, orange fruit doves, and ruddy ground doves.

Male pigeons are more opportunistic to mate with another female.

Scanned with OKEN Scanner

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 spreadAcross 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 defferent 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.

Scanned with OKEN Scanner

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 are 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.
-

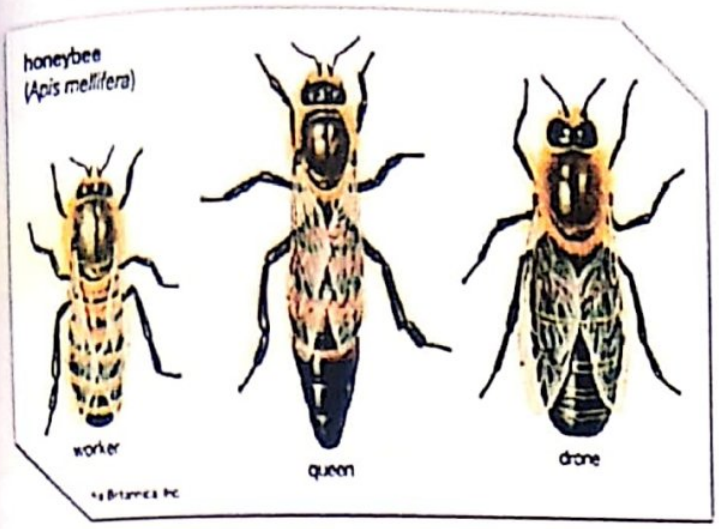
What do Crows Eat

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 crops, 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 frames 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.

Scanned with OKEN Scanner

INSECTS



Kingdom : Animalia

Phylum : Arthropoda

Class : Insecta

Order : Hymenoptera

Family : Apidae

Genus : Apis

Species : A. mellifera

HONEY BEE

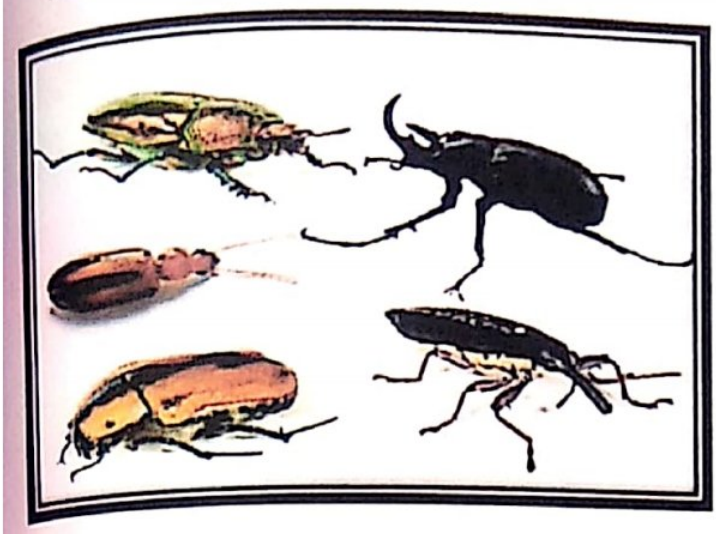
Both in complexity of behaviour and learning capacity, solitary wasps and bees are the equals of social wasps or Honeybees. Social insects, however, have developed a division of labour in which the members must do the work required at the proper time. If the society is to succeed, its needs must be communicated 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..

Scanned with OKEN Scanner

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

Scanned with OKEN Scanner

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.

Scanned with OKEN Scanner

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 Chennammna University Belagavi.

During year 2022-2023

Examiner:

1). .....

2). 12/9/23

Valued Dnaik 12/9/23

Dnaik

HOD

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

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

ROJECT TITLE :

"PROJECT ON LOCAL BIODIVERSITY"

NTRODUCTION :

Hungund taluka is located in the Estern part alkot district. It lites between 15⁰-52⁰ & 16-16⁰ north latitud s 75-50⁰ to 75-20⁰ east longitude. The taluk has Muddebihal talu ijapur district on the north. Raichur district on the east Kushtag f koppal district to the south Bagalkot tq on the north west ami tq south west & Ron tq of Gadag district on south east. It ha area of 135 sq Kms, with a population of 2.88 lakhs as per 201 us. The density of population is 181 per sq km. Taluka gets a rage rainfall of 597 mm per year .The taluka touches Malaprabh r on south & Krishna on the northern boundary. Krishna aprabha meet at famous historical place Kudalsangam, gund tq. Malaprabha is a seasonal river, going dry in winter mer months. Where as Krishna is perennial. These river gate an area of approximately 7439 ha. The total irrigated land i 5 ha of which 800 ha is irrigated by Bore well & open wells. 7.2% he land is under forest & 1.8% land is uncultivable land.

Major crops in Hungund tq are Jowar. Bajra & in th rif, wheat, sunflower, cotton in The Rabi. Inspite of two river taluka has not used irrigation to the fullest extent.

Recently sugar cane is being grown in small patches. Poultry is 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.

Scanned with OKEN Scanner

PEACOCK:

Scientific name: Pavo cristatus

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

Domain: Eukaryota

Family: Phasianidae

Kingdom: Animalia

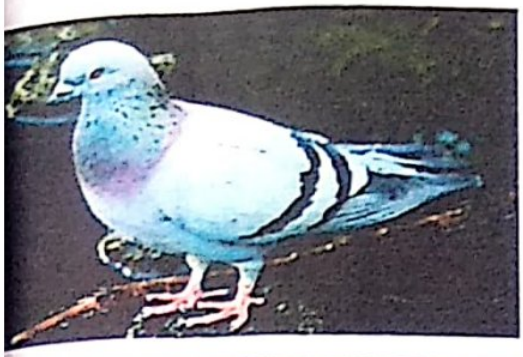
Order: Galliformes

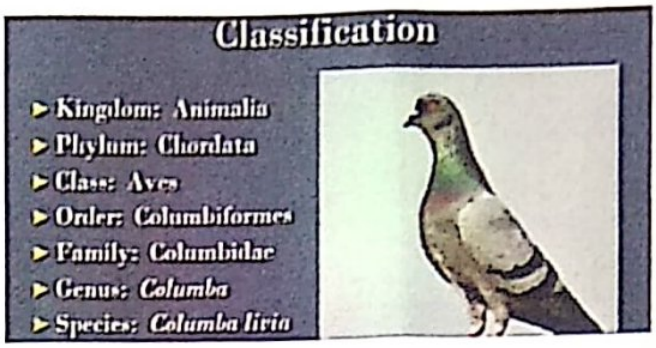
The Peacock or the common Peafowl, is the gorgeous bird of India. It is called 'Mayura' in Sanskrit, 'More' in Tamil and Malayalam, 'Nemali' in Telgu and 'Navilu' in kannada . Its orni – thological, and feeding on insects, Lizards and sankes apart form grain and vegetables shoots. It is a bird to which 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 celibrate 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.

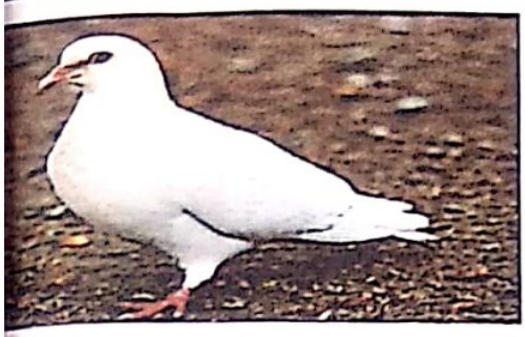
Let us look at the behavior of the peacock in the nature. It is normally in found In the world with the four and five peahens, which is condtitute his entourage, his Instincitive following in the right sesson. The female are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which is such distinctive features of the male in full plume. The peacock is shy bird and doesnot 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 undergrow to induluge in his grand courtship display with dignified patience and intensity.

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

igeons and Doves







Zoological Classification

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

ons and doves exhibit considerable variation in size, ranging in length from 15 to 75 centimeters (5.9 to in), and in weight from 30 g (0.066 lb) to above 2,000 g (4.4 lb). The largest species is the crowned on 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 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), largest arboreal species is the Marquesan imperial pigeon, while the dwarf fruit dove, which may sure as little as 13 cm (5.1 in), has a marginally smaller total length than any other species from this ily.

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

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

ddition 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 ies, the atoll fruit dove, is specialized in taking insect and reptile prey. Snails, moths, and other insects taken by while-crowned. pigeons, orange fruit doves, and ruddy ground doves.

e pigeons are more opportunistic to mate with another female.

CAL FAUNA : BIRDS

ows :

classification of the

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

ow bird is a member of the Corvidae family. Its genus Corvus is dely spreadAcross the world with more than forty identified species. searchers link the evolution of these birds to the corvid stock in Asia hich originated in Australia.

the species have the same appearance without much defferent tween the Genders. They are entirely black in color while some ssess slightly grey or white Colored plumage. Their beaks and legs e strong while the overall body is stout.

e species spread from Asia to several other places including Europe, ustralia,North America and Australia. In fact, they are widely stributed over all temperate Regions, However. The places where ey are not found include South America,

ead on to find out more interesting information about these triguing animals found

ommonly all over the world.

Scanned with OKEN Scanner

Facts about Crows

Following are some of the amazing facts about crows.

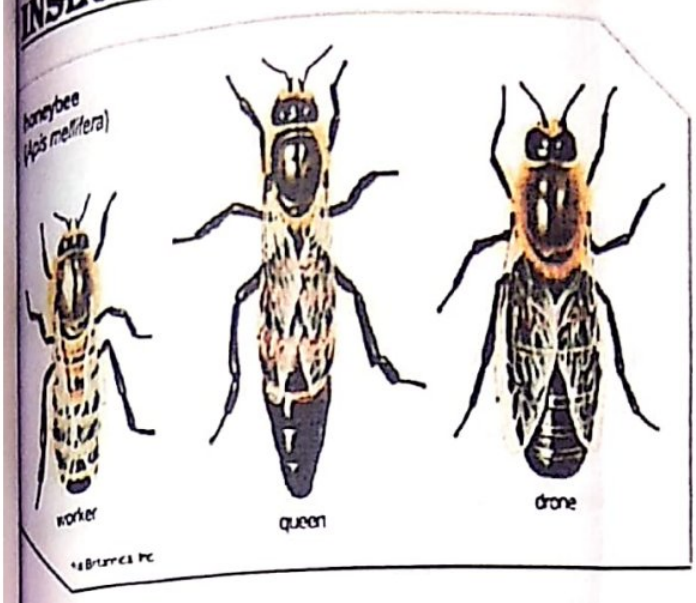
- Their origin dates back to seventeen million years ago in Australia.
- They are extremely intelligent with some species which can even construct and use tools
- During are search, they scored better than Bonobo Chimpanzees when tested for intelligence.
- Their fore brain is more developed and complex 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 crops, 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 frames 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

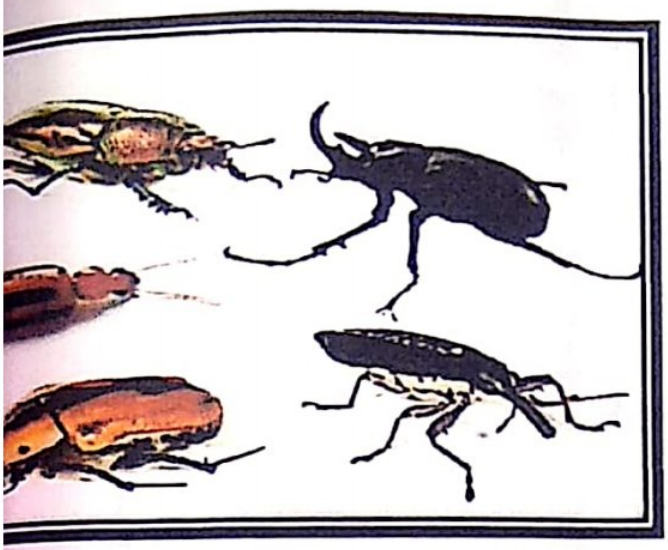
HONEY BEE

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..

EETLE.



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

Beetles are prominent in human culture, from the sacred scarabs of ancient Egypt o beetlewing art and use as pets or fighting insects for entertainment and gambling. Many beetle groups are brightly and attractively colored making them bjects 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

evil of cotton, the Colorado potato beetle, the coconut hispine beetle, and the ountain pine beetle. Most beetles, however, do not cause economic damage and any, such as the lady beetles and dung beetles are beneficial by helping to ntrol insect pests.

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). 12/9/23

Valued
Dmala
12/9/23

Dmala 31/8/23
HOD
Head of the Department of
ZOOLOGY.
V.M.K.S.R. Vastrad Arts, Science and
V.S. Bellihal Commerce College
HUNGUND. Dist Bagalkot

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 Estern part of Bagalkot district. It lites between 15^0-52^0 & 16-16^0 north latitude ands 75-50^0 to 75-20^0 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. Where as 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. Inspite of two rivers, the taluka has not used irrigation to the fullest extent.

Scanned with OKEN Scanner

Recently sugar cane is being grown in small patches. Poultry is 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

Scanned with OKEN Scanner

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.

Scanned with OKEN Scanner

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

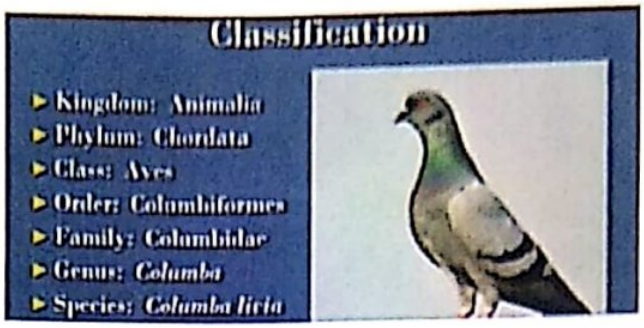
The Peacock or the common Peafowl, is the gorgeous bird of India. It is called 'Mayura' in Sanskrit, 'More' in Tamil and Malayalam, 'Nemali' in Telgu and 'Navilu' in kannada . Its orni – thological, and feeding on insects, Lizards and sankes apart form grain and vegetables shoots. It is a bird to which 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 celibrate 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.

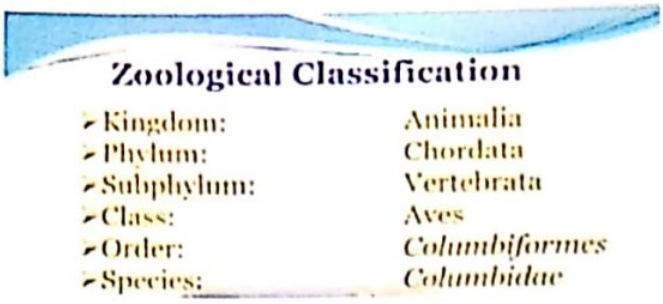
Let us look at the behavior of the peacock in the nature. It is normally in found In the world with the four and five peahens, which is condtitute his entourage, his Instincitive following in the right sesson. The female are plain looking and earthy brown above with a green sheen at the neck but without the long flowing, hind feather bursting with colour which is such distinctive features of the male in full plume. The peacock is shy bird and doesnot 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 undergrow to induluge in his grand courtship display with dignified patience and intensity.

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

Scanned with OKEN Scanner

Pigeons and Doves





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 while-crowned, pigeons, orange fruit doves, and ruddy ground doves.

Male pigeons are more opportunistic to mate with another female.

Scanned with OKEN Scanner

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 spreadAcross 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 defferent 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.

Scanned with OKEN Scanner

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 are 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.
-

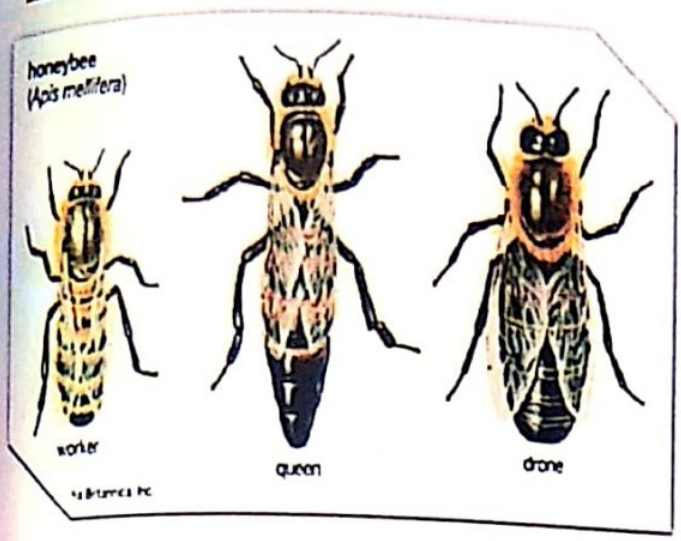
What do Crows Eat

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 crops, 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 frames 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.

Scanned with OKEN Scanner

INSECTS



Kingdom : Animalia

Phylum : Arthropoda

Class : Insecta

Order : Hymenoptera

Family : Apidae

Genus : Apis

Species : A. mellifera

HONEY BEE

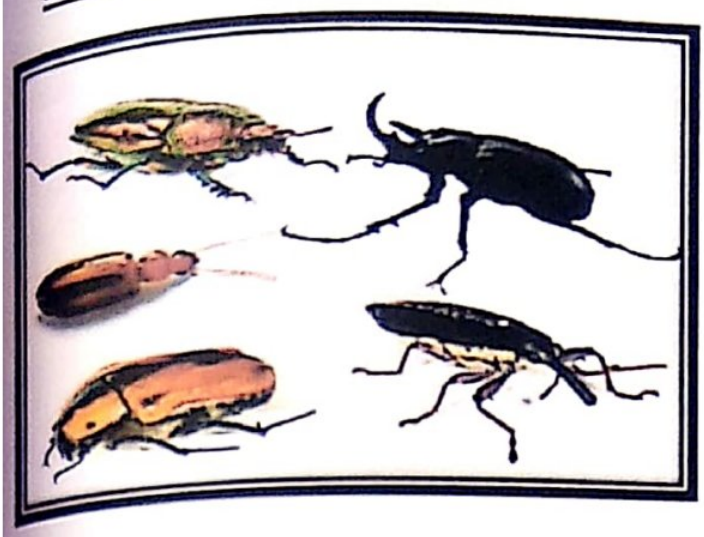
Both in complexity of behaviour and learning capacity, solitary wasps and bees are the equals of social wasps or Honeybees. Social insects, however, have developed a division of labour in which the members must do the work required at the proper time. If the society is to succeed, its needs must be communicated 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..

Scanned with OKEN Scanner

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

Scanned with OKEN Scanner

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.

Scanned with OKEN Scanner