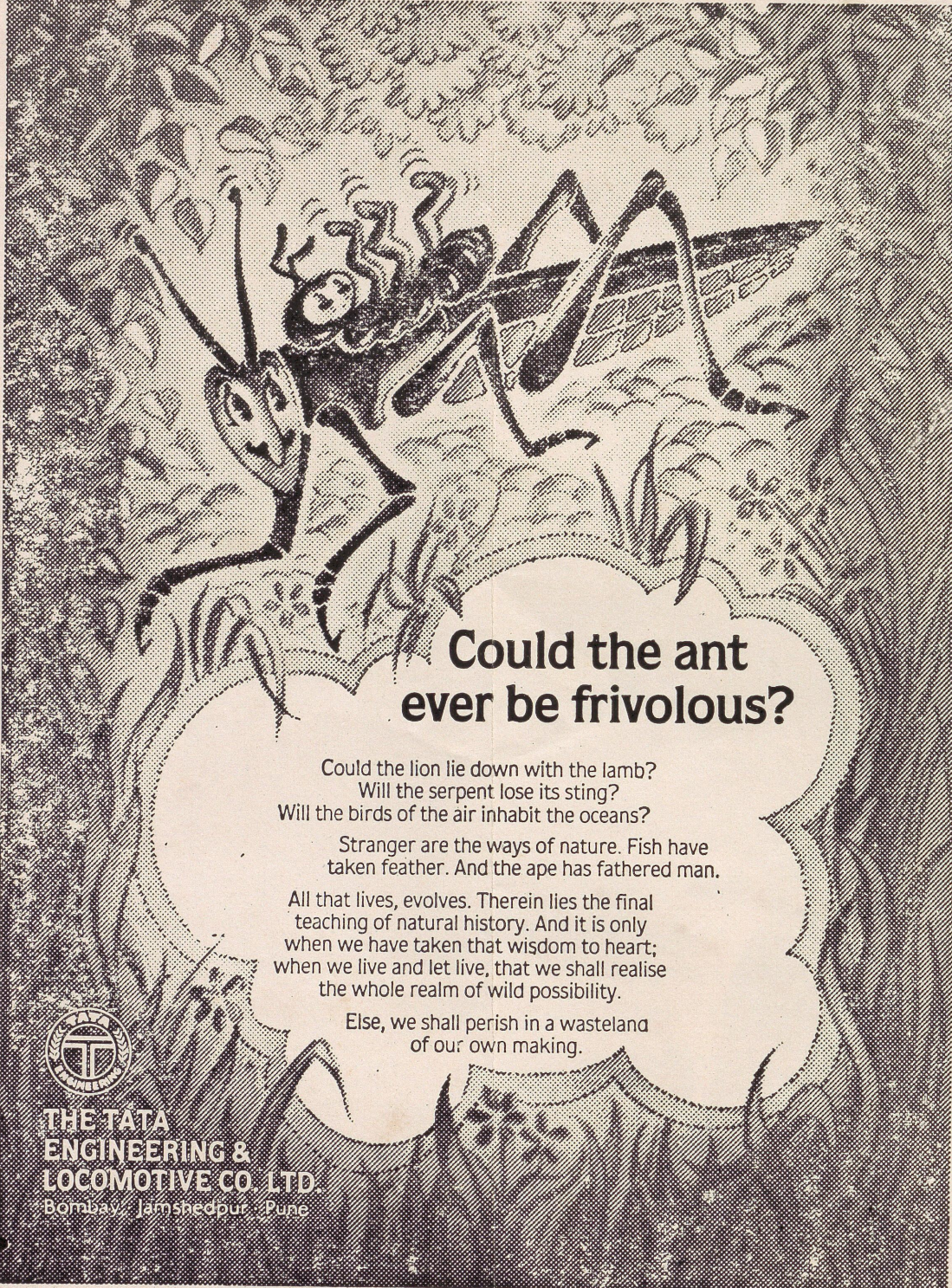


Newsletter for Birdwatchers

VOL. XXVIII No. 11 & 12 Nov. – Dec. 1988





Could the ant ever be frivolous?

Could the lion lie down with the lamb?
Will the serpent lose its sting?
Will the birds of the air inhabit the oceans?

Stranger are the ways of nature. Fish have
taken feather. And the ape has fathered man.

All that lives, evolves. Therein lies the final
teaching of natural history. And it is only
when we have taken that wisdom to heart;
when we live and let live, that we shall realise
the whole realm of wild possibility.

Else, we shall perish in a wasteland
of our own making.



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EDITORIAL

Valuable Suggestions

Readers often send useful suggestions for improving the quality of the Newsletter, which I regret, I do not always implement. A case in point is Ms. Manuele's letter published in the Correspondence section. Among other things she asks "Are there any specific areas which are not yet known". There are of course many ordinary things which we do not know. We do not even know whether both parents in the case of a common bird like the Brahminy Kite incubate the eggs. Salim Ali says "both sexes share in domestic duties" though some others question whether both birds incubate the eggs. The area of study which is very worthwhile for ornithology in general and so interesting for the observer is to relate the bird to its habitat. Climate, soil, vegetation, and prevalent forms of life, all together determine whether an area is suitable for a particular species. I cannot understand why the magpie robin does not reside and nest in our garden though it has occasionally come on a tour of inspection. I have little hope of finding an answer, but the attempt is always interesting.

State Birds

An article in the Birdwatchers' Digest of July/August 1988 on Birds of State makes me wonder whether we should attempt to have State Birds in India. When the question of selecting a National Bird came up, one suggestion was to nominate the Great Indian Bustard, so as to draw attention to its endangered status. The peacock won on sentimental grounds, and I remember Joseph George's query about whether the pea-hen could share the throne. If we are to select State Birds, it could be on several basis : A rare bird, a visible goodlooking bird, a good songster, a useful bird as a destroyer of insects or whatever. The American Robin. Hawaii did well to select the Nene Goose which was saved from extinction by the efforts of Sir Peter Scott; and Utah named the California Gull in gratitude to a bird which destroyed a locust swarm many years ago.

Let us see if some of our readers can come up with criteria for selection, and suggestions, for our 22 States.

Reproductive Strategies in Waterfowl

In exchange for the Newsletter, I receive *Ornis Fennica*, the journal of the Finnish Ornithological Society. Vol. 65, No.2 of 1988, contains useful guidelines for a serious student of waterfowl. I quote from the article by Terhi Laurila, Department of Zoology, University of Helsinki, Finland. There are 149 waterfowl species worldwide, and it is remarkable that data on 142 of these were obtained. The mean clutch size varies from 2-14 eggs. David Lack proposed that clutch size is limited by the food resources available to the female around the time of laying. Also that large eggs were advantageous because they allowed the duckling to hatch at a more advanced stage. Larger species tend to have smaller clutches than smaller species. This is not always so. Our sunbirds and tailor birds have only 3-4 eggs while the partridge and jungle fowl could have a dozen.

What is interesting from our point of view is the list of independent variables which the author identified for his study. These were :

"Breeding range (the range, in latitudes, where breeding occurs regularly ; introduced populations were not taken into account).

1. Restricted (2-20)
2. Intermediate (21-40)
3. Wide (41-115)

Distance from the equator (the northernmost, or southernmost — for southern hemisphere species, limit of the breeding range, in latitudes).

1. Tropical (0-30)
2. Temperate (31-60)
3. Arctic (61-90)

Mating system

1. Monogamous, permanent pair-bond.
2. Monogamous, seasonal pair-bond.
3. Polygamous

Feeding type

1. Feeding mainly by grazing
2. Feeding mainly by dabbling
3. Feeding mainly by diving
4. Feeding mainly by diving and grazing.

Age at maturity

1. Mature in the first year of life
2. Mature in the second year of life
3. Mature in the third or in a later year of life

Nest concealment

1. Nest on the ground, usually not concealed from above.
2. Nest on the ground, usually concealed from above.
3. Nest in a hole or cavity.

Paternal care

1. No male guarding
2. Male leaves female after laying
3. Male stays for some time after laying
4. Male helps in brooding
5. Male defends a territory and helps in brooding
6. Male defends a territory, incubates and helps in brooding.

Independence of the young

1. Young independent after fledging
2. Young independent at fledging

3. Young independent before fledging
4. Young independent soon after hatching

As the whole material comprised only one family, I used species as the taxonomic unit for comparisons."

Redbacked Shrike

M.K. Himmatsinhji in his articles refers to the earlier presence and then the disappearance of the redbacked shrike from his grounds in Kutch.

It is well known, of course, that even a slight change in habitat conditions makes it incumbent on some species to leave the area. I remember the existence for many years of a small group of whitebrowed bulbuls in a wooded patch near our house in the suburbs of Bombay. The birds, as far as I recall, never came to our garden, but continued to survive in (to my eyes) much less hospitable surroundings than our grounds. It was only when the wooded area was hacked down by builders that the birds departed from the locality for good.

I have written earlier that with the growth of trees in our Bangalore garden we have lost the pied bush chat and the blackbellied finch lark, both species which abound in the neighbourhood. Birds are certainly choosy about their living rooms. There is the famous case of the sedge warbler in the United States, which favours only areas where juniper trees are regularly burnt down. It would be interesting to hear from readers about species with which they are very familiar being attached to particular forms of vegetation.

BIRD LIFE OF INDIA : IN HOMAGE TO SALIM ALI

MADHAV GADGIL and R.J. RANJIT DANIELS

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The Indian subcontinent, and here we will follow Salim Ali-Ripley Handbook in considering Pakistan, India and Bangladesh together, has 1200 of the 1500 species of the Oriental region. How are these distributed over the subcontinent? We may again think of this diversity being a result of barriers to dispersal, of a range of habitats being occupied by different species, and of any one habitat type being packed through differentiation of ecological niches.

6. Geographical Distributions

One may then begin the enquiry with geographical ranges of the bird species. Are most species confined to small portions of the total subcontinent, or do they all overlap throughout the subcontinent? As in other regions, we expect the sizes of geographical ranges to follow lognormal distribution, with many medium sized and a relatively few

very large ranges. At the two extremes stand the Narcondam Hornbill, confined to a single island of 4 km² in the Nicobars and the Little Green Heron with a distribution covering much of the globe. The Laughing Thrushes, a group of highly sedentary forest dwelling birds of hills exemplify ranges of birds characteristic of habitat islands. The barriers to dispersal between the different suitable habitats of this genus have evidently lead to a high degree of speciation. In direct contrast is the Jungle Crow *Corvus macrorhynchos*, a species with the widest tolerance of habitat conditions. It is to be seen everywhere from the sea coast to the top of Nilgiris, in the forests, scrub and the heart of cities, and its distribution encompasses most of the subcontinent. Yet another distribution pattern is exemplified by the pair, Velvetfronted Nuthatch and the Great Indian Bustard. The two have quite widespread, but complimentary distributions, the former confined to treelands and the latter to grasslands.

A different kind of complementarity of ranges is exhibited by the two species of Junglefowl, the Red and the Grey, *Gallus gallus murghi* and *Gallus sonneratii*. There are other such species pairs of ecological equivalents too, often one to the north and east of Godavari and the other to the south and west. Other notable distribution patterns are discontinuous, the extreme form being that of the Fairy Bluebird occurring in the rainforests of the Western Ghats, and Northeastern India. The Black and Orange Flycatcher, an endemic of Western Ghats has a highly discontinuous, patchy distribution within its range.

How would the geographical range size of a species relate to the likelihood of its going extinct? A species like the Narcondam Hornbill or the Nilgiri Laughing Thrush with a very restricted distribution is obviously more susceptible, for their total populations are quite limited; a mere 400 in the case of the Narcondam Hornbill. Furthermore if the population undergoes a crash, with a local outbreak of disease or a flood or a cyclone, there is little possibility of its replenishment. Mountain quail, one of the species to have gone extinct from India had such a highly restricted geographical range in the Kumaon hills of Western Himalayas.

7. Species – Area Relationships

The geographical ranges of different species obviously overlap to a great extent, so that the bird community of any given region has a large number of species. A significant ecological question is to understand how many, and the factors governing this number. An excellent point of departure for examining this question is the regional bird surveys that were such a valuable contribution of Dr. Salim Ali. Beginning fifty years ago with his surveys of the birds of Bombay and Salsette islands, he meticulously collected and documented the bird faunas of 12 different regions. To these we have added a few other surveys including two of our own now available. At the lowest spatial scale we have our own data from surveys of 10 ha plot at Bhairumbe which harbours a total of 106 species; at the medium spatial scale are several regional surveys; and the subcontinent as a whole with an area of 4×10^8 ha harbours 1200 species. The data has been plotted on a log-log scale, and the line of best fit suggests that the relationship is of the following form :

$$S = 98 A^{0.12}$$

where S is the number of species and A is the area of the locality in hectares. While it would be improper to extrapolate the relation to very small areas, it does suggest that small, homogeneous habitats of about 10 ha in size may harbour around 75 species, with the species number increasing with area with a power of 0.12; i.e., the species number doubles when the area increases by a factor of about 340 times. The first number of 75 is the packing of species within a homogeneous habitat due to niche differentiation; the latter, the increase as area increases is due to other kinds of habitats being included in the survey, with these new habitats bringing in an additional species component.

8. Habitat Preferences

Any region may be thought of as a mosaic of different kinds of habitats. These may be markedly different from each other as when a swamp is surrounded by forest, or may gradually grade one into the other, as when the forest becomes progressively stunted towards a wind exposed ridge. Different species differ from each other in their sensitivity to environmental grain, the more fine grained species discriminate habitats in greater detail and may be specialized to a narrower range of habitats. We have looked at the 580 species of the Western Ghats province in terms of their utilization of the 24 different habitats of the province. A species may use between 1 to 23 different habitat types, with a mode at 2. The frequency distribution of habitat use is highly skewed positively, conforming to the lognormal. Such a distribution implies that the variable, the number of habitats utilized by a species in this case is governed by a large number of factors, acting in a multiplicative fashion. Such a distribution is encountered in many phenomena of interest to us; for instance in the size frequency distribution of geographical ranges as well as in the relative abundance of bird species in a community of birds. When such a distribution obtains extreme large values are far commoner than would be the case with a normal distribution. Thus in this case the mean number of habitats used by a species is 3.21 and the standard deviation 2.12; nevertheless there are species using as many as 23 different habitat types. The most versatile of all species is of course our Jungle Crow (*Corvus macrorhynchos*). It occurs everywhere from the sea coast to the highest peaks in the Nilgiris and Annamalais, in the high rainfall tracts of Kerala to the desert of Western Rajasthan, in open forest far away from habitation to the heart of Bombay and Calcutta.

These 24 habitats may be ranked in terms of the proportion of total species utilizing them. It turns out that the three habitats used by the largest number of species are the dry tracts under cultivation, and suburban habitation. More natural habitats such as freshwater marshes, semi-evergreen forests, rocky hillocks with scrub and evergreen forest then follow. This is contrary to the usual wisdom that the evergreen forest is the biologically most diverse of the habitats. In fact, our studies of flowering plant and insect diversity on the Western Ghats also corroborate this finding; the evergreen forests are not necessarily the most diverse; moderate levels of human disturbance tending to enhance species diversity. This enhancement of species diversity through human disturbance seems to relate to the fact that such disturbance tends to render the habitat more heterogeneous with a patchwork of grass and scrub and tree growth that can pack in larger number of species.

Of the 580 species, 40 are habitat specialists in that they use only one of the habitats, while 14 are highly generalized in that they use 9 or more habitat types. As expected, the generalists (Peafowl, White breasted Kingfisher) use the 24 habitats much more evenly. Thus between 5 and 6 habitats account for almost 50% of total habitat use by all the

species; with generalists it takes between 9 and 10 habitats to account for a similar fraction. The habitat specialists on the other hand are concentrated in very much fewer habitats, the freshwater marshes accounting for 44% of them, rocky scrub 14% and the evergreen forest 12%.

The bird fauna of India may then be thought of as comprising of four major components. The majority are generalists inhabiting treelands of various types, and disturbed by man to different degrees. These also contribute towards our familiar garden birds. The second component is the

specialists of wetlands; the habitats. The most threatened of these are undoubtedly the wetland and dry scrub/grassland specialists for these are the habitats being the most rapidly eliminated from our sub-continent. Hence the extinction of Pinkheaded Duck and the near — extinction of Jerdon's Courser. It is also the reason why the Whitewinged Wood — Duck, the Great Indian bustard and the Bengal Florican have suffered such drastic reductions in their population.

(To be continued)

OBSERVATION ON THE NESTING OF GREEN BARBET IN A DELHI GARDEN

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In this article I report my observations on the nesting of Green Barbet (*Megalaima zeylanica*) in a Delhi garden, made during the period of 1986-87. These observations were made over prolonged tea sessions in the sunlit gardens of Gwyer Hall. Gwyer Hall is one of Delhi University's halls of residence and is rather unique in its archaic architecture — with its rows of pantheon pillars, high ceilings and sprawling lawns — all reminiscent of a bygone era.

During Nov. - Dec., 1986 I began hearing the characteristic territorial calls of green barbets. Ali and Ripley's Handbook describes these calls as : a harsh 'kr-r-r-r, kr-r-r-r, kutroo, kutroo, kutroo.....' and 'kutruk, kutruk, kutruk...'. Quite by chance a pair of green barbets decided to build their nest in a neem tree in Gwyer Hall gardens, quite close to where we would sit. The nest site faces south east and its height is above 15m from ground level. Our observations thenceforth were mostly about this pair and are summarized below.

1. Green barbets start their characteristic territorial calls and nest excavation in Nov/Dec (in Delhi) but they actually commence breeding in March. Thus, for roughly 3-4 months before they breed, barbets are busy chipping in the tree trunks for excavating their nest.
2. Nest excavation is completed in stages. Our observations are: a shallow cup is first dug; this is deepened and later the diameter is enlarged by chipping at the rim. The whole process is repeated several times during nest excavation.
3. Since there is no sexual dimorphism in green barbets it is difficult to say to what extent the different sexes were sharing the task of nest chipping. However, individuals of the pair under observation were seen to take over, one from the other, during the chipping operation. Therefore it can be assumed that both sexes share nest building chores and that pair formation occurs early. (Our guess about pair formation is a solitary male first starts preliminary chipping at a chosen site. He is later joined by a female and together they complete excavation of the nest.)

4. An interesting observation concerns the conspicuous naked orange coloured skin patch around the eye of green barbets. We observed that the skin patch would change its colour from dark orange to yellow, after a bird ended its chipping session. Ali and Ripley do not mention 'any change of colour of the bare patch but I feel that what we observed could have a relationship to chipping activity. The colour change could possibly be indicative of the level of blood flow in the head region, following intense physical activity.
5. During the period in which the green barbets were excavating their nest and also afterwards, they were often troubled by rose ringed parakeets and common mynas. The trouble caused was mainly with the intent of driving the barbets away and taking possession of the nest cavity.
6. In Jan., 1987 we chanced to see a Crimsonbreasted Barbet (*Megalaima haemacephala*) excavating a nest in another part of the Delhi University campus. Observations on this are interesting from a comparative view point : the nest site was considerably lower (about 10m); a nest was being excavated on a Ficus tree (which is presumably much softer than a neem tree branch) and most importantly, the chipping had started in January. This means that between Jan. to March, this smaller cousin of the green barbet could complete its nest excavation in a much smaller time period.

Nest Excavation Period :

It is well known that in birds actual breeding (i.e. courtship, copulation, egg laying etc.) can start only at a particular period of the year when food and other resources are abundant in the local environment. For most frugivorous birds in North India this period is in spring, sometime in March (nearby the Holi festival). Barbets are primary hole nesters (they themselves excavate their nests — although the occurrence of opportunistic nesters which do not excavate, in any population, is not ruled out) in contrast to secondary hole nesters like myna, sparrow, roller etc. On these accounts

timing and duration of nest excavation has considerable significance in the overall reproductive strategy of barbets. Considering that drilling in a hard tree trunk is energetically a costly affair and bound to consume considerable time, it is not surprising therefore that barbets have obviously evolved a strategy for maximizing reproductive success. This strategy consists of starting excavation activities well before (roughly 3-4 months in green barbet and 2-3 months in crimson-breasted barbet) the actual breeding time comes. In contrast to barbets, apparently easy to build nests (from an energetic view point) consume lesser amount of time. For instance, sparrow's quickly build a nest, in a matter of few days only, and start breeding.

Nest Site Competition :

Panicker* has done a study to determine whether inter and intraspecific competition for nest holes is a major factor

affecting breeding success of hole nesting birds. Our observations merely confirm that nest site competition is quite intense, as several times the green barbets were on the verge of being driven away from the cavity which they had excavated. Panicker emphasizes that a cavity in a tree is shared by different species of birds simply by a variation in the period of breeding. This connotes resource partitioning among birds and i feel a study of barbets could be a nice model. At the same time several questions on barbets in Delhi would be worth looking into. Green barbets are quite common in Delhi and it would be interesting to see what tree species they prefer for their nesting and what factors have been responsible for their success. Also, is a certain nest height a characteristic of different species of the genus *Megalaima*. Finally, an experimental verification of the role of nest site competition could make a good academic study.

HARRIERS AT TAL CHHAPAR BLACKBUCK SANCTUARY, RAJASTHAN

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After four years of severe drought in Rajasthan, the monsoon was normal in 1988. The whole desert turned green. Growth of grasses was especially good in the protected areas and sanctuaries. To study the effect of drought on the wildlife, naturalists from Jaipur (A.K.S., Harkirat Singh, Rajpal Singh and Asif) visited Tal Chhapar Blackbuck Sanctuary in Rajasthan. We were fortunate enough to be on time to witness passage migration of Harriers. The grass was about one to one and a half feet tall and on the bare patches in the grass harriers were sitting, spread out evenly in the entire sanctuary.

The Forest guard estimated that in the summer of 1987, only about a thousand Blackbucks survived, out of a total two thousand. Now it appears that wildlife at this sanctuary is recovering fast. But still there is scarcity of water. Only a small canal and a slight depression had water in it. Water in the sanctuary used to come through a nullah from Gopalpura hills. Now these water channels have been blocked by the salt works at the boundary of the sanctuary. Consequently, Blackbucks and other wildlife are dying during summer months.

We drove, into the sanctuary at 16.30 hours on the evening of September 3rd. On both sides of the road were small trees and on these trees *shorttoed* eagles were sitting. In all we saw at least 6 or 7 birds. We moved around in the grass silently. Blackbellied finch-larks, skylarks and crested larks flew off at our approach. Wherever, there was a bare patch in the grass, harriers were sitting. Harriers appeared to take advantage of the blackbuck flushing out grasshoppers and other insects. We saw mostly immature and female harriers. We also saw one Montagu's harrier in black phase.

Only Marsh harriers were easily recognisable. We didn't see any male harriers on the evening of 3rd September.

According to the Handbook 'Female Montagu's & Female Pale Harriers are indistinguishable in the field and females of both these species only doubtfully distinguishable from female Hen harrier by smaller less prominent white rump patch.' Also immatures of Hen harrier, pale harrier and Montagu's harrier are inseparable from female of these species in the field.

While returning back, we visited a small shallow pond, which was almost dry. A lone spotbill was sitting at the margin of the water. Small green bee-eaters, blue cheeked bee-eaters and blue tailed bee-eaters were gathering to roost for the night.

A party of blackbucks along with a few fawns were grazing and near these about 125 cattle egrets in breeding plumage were busy feeding. Only a single little egret was among this flock. Beside the cattle egrets about a hundred common myna, mostly immature birds were also feeding. It was getting dark and visibility became poor. Two big dark eagles were sitting on a large Babul tree (*Acacia arabica*). Because of poor light, we were not able to identify these birds.

The next morning we started off at 07.00 hours (4th September). Near a water filled canal, we noticed a pair of spotbills, a green sandpiper and a greenshank. Harkirat noticed a small waterhen like bird with under tail coverts white but it disappeared before we could identify it. Grey partridges were calling all the time and sometimes the soft call of a common sandgrouse was also heard. In the distance Blackbucks were feeding. An immature Marsh harrier flew past us. Two black ibises were also busy feeding.

We entered the grass leaving the road and were surprised to see a number of male Montagu's and a few male Hen harriers. We did see some female harriers but not in the same number as on 3rd evening. Apparently they had migrated from here and what we were noticing was passage migration of harriers.

One Kestrel was hovering in the distance. It dived a few times in the grass presumably with success, because, it took some time to come out of the grass, every time it dived.

We moved towards the boundary of the sanctuary and here a mud wall separates the sanctuary from the private land. On this side, about 400 acres of land was given away by the forest department to the salt works. A sad story for the sanctuary and blackbucks.

On this mud wall Kestrels and some immature harriers were sitting. We turned around and as we were moving

towards the road a fox ran through the grass to hide in a thicket.

After moving a little more, we noticed a whitish buff eagle sitting in the grass, feeding, when it finished feeding, it flew off to a small tree where another similar eagle was sitting. It had white rump, dark tail and a dark trailing edge to the wings.

As it was getting hot and humid, we returned back to the rest house. After a short rest we went out to a small pond near the Chhaper village. In the pond we saw four spotbills and some little grebes. Black Ibises were feeding near the pond.

Tal Chhapar, a unique ecosystem is now facing many problems, scarcity of water, spreading *Prosopis juliflora*, encroachment and disturbance by the saltworks, menace of Pariah dogs and lack of funds.

SPARROWS' BLACK STATUS SYMBOL

CHRIS BARNARD

Status symbols are a pretty mixed bag. Anything from Porsches and Poussins to VW insignias and strings of beads can be pressed into service in the name of oneupmanship. Some symbols reflect wealth or measures of physical prowess, others are simply arbitrary whims of fashion. Other animals adopt status symbols too, but there's nothing whimsical about these. Status symbols designed by natural selection always mean business. The familiar house sparrow (*Passer domesticus*) is a case in point.

House sparrows are one of a number of small bird species which appear to use a "status badge" system to determine social dominance in competition. The badge in this case is confined to males and consists of the conspicuous black patch on the throat and breast. The bigger the patch, the tougher the male and the higher his social rank. Recent work by Anders Moller of the University of Uppsala has shown that the size of male sparrow's badge determines both his status among males and his attractiveness to females.

During winter, when food demand is high and days short, males with large badges have priority at feeding sites without the need for costly and injurious fights. Only when two birds have so similar badges that their status is difficult to tell apart does the argument become physical.

All this red carpet treatment pays dividends in the long run. Well-fed dominant males are able to acquire high quality breeding territories (those with sheltered nesting places) much earlier in the spring than their undernourished low-status companions. While some low-ranking males in Moller's study did manage to obtain territories, their responses to stuffed males with different sized badges suggested they would soon lose them to any large-badged challenger.

One problem with all this, however, is that the throat patch status badge is cheap to produce. The metabolic cost

to the male of producing a bit more pigment (melanin) to bump up the size of his badge is negligible, so what is to stop weaklings masquerading as tough guys by sporting large badges? The answer seems to be the sparrow equivalent to putting your money where your mouth is. Even the topmost birds are occasionally challenged to see whether their front is genuine. Low-status males who are artificially promoted by having their badges enlarged with dye are rumbled almost straight away. Once uncovered, cheats have a tough time and draw a much increased rate of attack from companions.

Since aggressive policing keeps the status badge system reliable, females can use the size of male's badge as a guide to his quality and the quality of her offspring should she choose to mate with him. Moller's study suggests that females have a strong preference for big-badged, macho males and even solicit mounts from stuffed dummies as long as they have large badges. Males with big badges paired with females earlier in the breeding season and were able to defend them from clandestine copulations by other males. By the same token, however, they themselves managed to sneak several extra-pair copulations with other females by outcompeting rivals in communal sexual displays.

Nevertheless, despite their philandering, big-badged males are still a good bet for females. Moller found that their high quality, sheltered nest sites resulted in fewer chicks falling to their deaths or being lost to predators and that they were more likely to care for their offspring by feeding them. Furthermore, males with big badges had bigger testis and were likely to transfer more sperm per copulation. All round, therefore, females mating with high-ranking males produced more surviving offspring who stood to inherit their father's passport to success.

— The Guardian

SOME BIRDS AROUND PUSHKAR LAKE

INDRA KUMAR SHARMA

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Pushkar Lake is considered to be one of the holiest lakes for Hindus, and the second largest river of western Rajasthan, the Luni, emerges from here. The lake is situated at the easternmost end of the Aravalli range, and its water spread is 1.25 kms x 0.65 kms. The major flora consist of Lotus (*Nelumbium speciosum*), *Polygenum hydropiper*, *Potamogeton spp.*, *Saccarus spontaneum* and *Cyperus spp.* Sugar cane is abundantly grown on the southern bank. Our observations were made in November 1986, when there was a heavy mela rush because of Megha Mela.

Labeo rohita and *L. calbasu* and *Channa matruilius* are semi-feral fish in the lake. There are plenty of these and of a large size because the pilgrims feed wheat flour paste and roasted gram to them.

Comments on the Newsletter — V. Santharam, 68, Santhome High Road, Madras - 600 028.

I have the following comments on the July-August '88 issue of the Newsletter for Birdwatchers.

With reference to Mr. Theodore Baskaran's note on unusual congregations of spotbill ducks, I would like to mention that a similar congregation was reported by me in the Nov-Dec 1982 issue of the Newsletter. This observation was made in June 1982, at the Kalyani Dam (Chittoor Dist., A.P.), and about 250 birds were seen.

Mr. S.N. Varu has reported about Ringed Plover. Was it the Eastern Ringed Plover (*Charadrius hiaticula*)? It would be better if the Latin names for these records are also included to avoid confusion.

Regarding Mr. Himmatsinhji's suggestion of re-naming the Whitecheeked Bulbul as 'Yellow-vented Bulbul'. I would like to point out that the whitebrowed bulbul has also a yellow vent and so it might lead to some confusion.

Suggestions for the Newsletter — Ms. Manuele, Hermitage, Auroville P.O., Post Restante-605 101, Morattandi.

It is always with pleasure that I receive and read the Newsletter for Birdwatchers, and I am glad to see that it is now properly printed.

I have one suggestion, though. Would it be possible to include in it something like a "Reader's Corner", where letters from readers, suggestions, questions, could be published, and if possible, have someone answer the readers' questions? Or is it too much work for the present editorial team (if team is the right term, as I do not know if you do this Newsletter all alone). In case you find this suggestion interesting, I personally have two questions:—

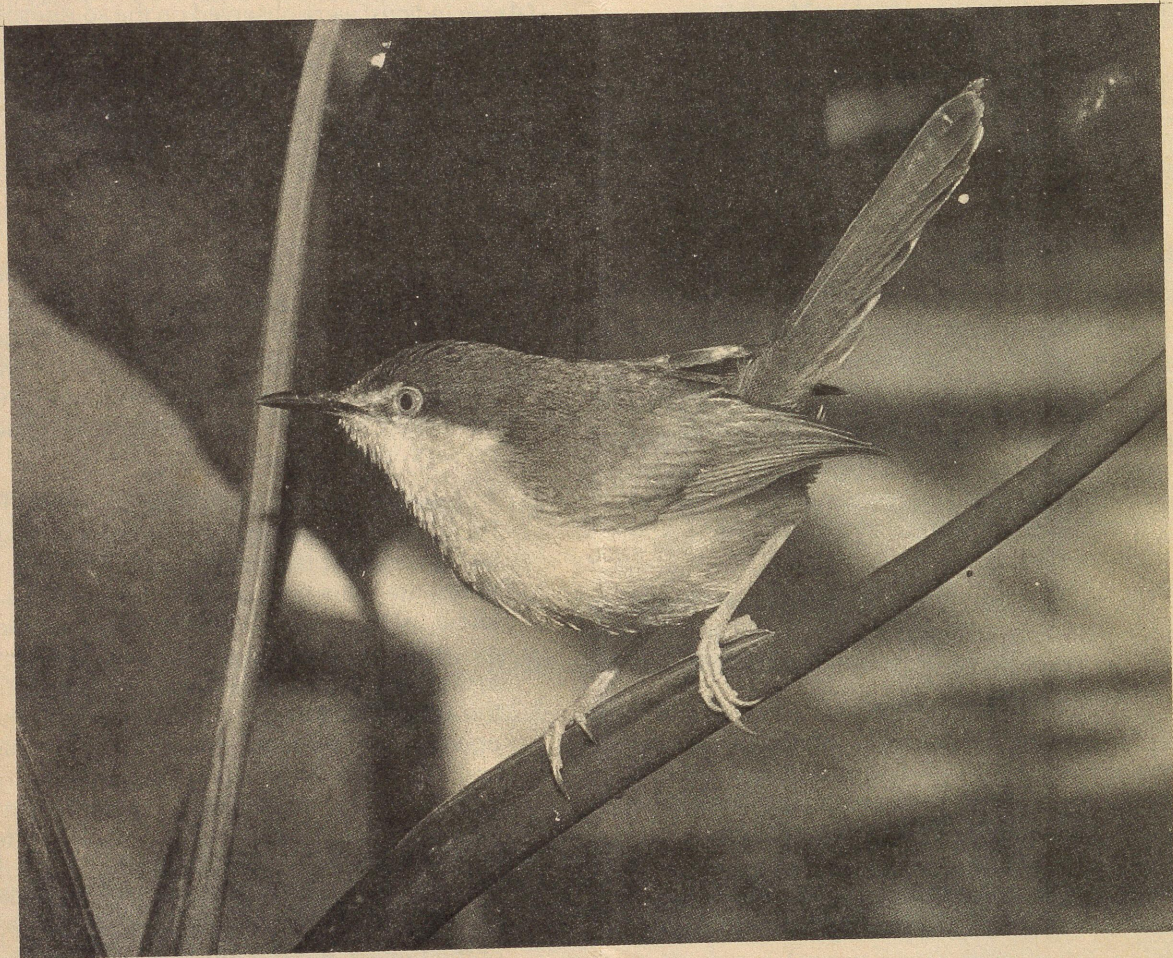
The Little Grebe (*Podiceps ruficollis*) is quite common and lives in the middle of the lake. At this time the population consisted of about 11. Seven white eyed pochards (*Aythya nyroca*) were also observed mainly near the banks where there was less human activity, but they were not too wary either because no one molested them. Eight Little Cormorants (*Phalacrocorax niger*) were observed at the southern bank basking in mid water, perching on stones and on the water supply pipelines. Two pairs of Barheaded Geese (*Anser indicus*) were observed on the southern bank where there was much aquatic vegetation. There were also Little Egrets, Little Stints, Blackwinged Stilts and Sandpipers where the water was shallow. It was a pleasure to see so many birds in close association with man. This shows that birds lose their fright of humans if they are not molested.

1. Regarding the Blue Jay (*Coracias benghalensis*), how does one recognize the male from the female? Which one is the noisiest? We constantly have them around here, and I see them quacking, making love, perching for hours on a low bush, but as soon as they fly off, I can't make out who's who. Are there any clues? (Salim Ali says "sexes alike".)
2. I observed the courtship display of the Redwinged Bush Lark (*Mirafra erythroptera*) for a very long time last winter, and the same question came to my mind. When the male goes up and down, in V, si-si-si-si, we know it's the male. But when they are both on the ground, it's not that easy to find out. One was crouching in the grass, (a bit as a cat before catching a lullaby), and the other one was turning around, with the tail a bit upward, coming near, going further, coming nearer, and so on. The other one in the grass was doing as if he (she?) couldn't see anything, but when the other one was out of sight, he would turn slightly to see him (her?) again. And I was wondering which of the two is the male, because we know that it's normally the male who makes much effort to please and attract the attention of the female, but the one turning around with its tail upward looked more like a female keeping ready for the male to enter. Do you know?

Also, in the Newsletter, we find a lot of observations from people who tell what birds they see in their area. But could anyone publish an article, giving more details as to what information could be more particularly helpful to enrich our knowledge of birds? Are there specific areas which are not yet known, on particular birds which we do not know much about? And how to keep track (intelligently) of the birds we see, in a way that may be useful to others later on? Could you publish a list of "rare birds" that may be worthwhile noting down if we see them?

Small Indian Pratincoles Spotted in Swarm Proportions — K.S. Harshavardhana Bhat, C/o. 'Indian Naturalist', Udupi - 576 101.

Small Indian Pratincoles (*Glareola lactea*) were first spotted during the Asian Midwinter waterfowl census during January, 1987 at Gangolli Estury (c 13° 37' N, 74° 47' E), 45 Kms. north of Udupi. During November, 1988 they have again been spotted in almost swarm proportions (a flock of more than five hundred) at Betlikki wetlands, 20 Kms. south of the Gangolli Estury.



Ashy wren-warbler (*Prinia socialis*)

Photo S. Sridhar

ಮಾತಿಗಿಂತ, ಕೃತಿ ಮೇಲು : ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಾಧನೆ

ಕನ್ನಡ ರಾಜ್ಯೋತ್ಸವ ದಿನ; ಕನ್ನಡ ಮಾತನಾಡುವ ಜನರಲ್ಲಿ ಒಂದು ಗೂಡಿ, ಒಂದೇ ಆಡಳಿತಕ್ಕೆ ಒಳಪಟ್ಟು ಅಪೂರ್ವದಿನ. ಈ ಮಂಗಳ ದಿನದ ಮೂವತ್ತೊಂದನೆಯ ವಾರ್ಷಿಕೋತ್ಸವವನ್ನು ಆಚರಿಸುತ್ತಿದ್ದೇವೆ. ಈ ಮೂರು ದಶಕಗಳಲ್ಲಿ ಕನ್ನಡ ನಾಡು, ಕನ್ನಡ ನುಡಿ, ಸಂಸ್ಕೃತಿ, ಸಾಹಿತ್ಯ, ಕಲೆಗಳ ಸಂವರ್ಧನೆಗಾಗಿ ಸರ್ಕಾರ ಅವಿರತವಾಗಿ ಶ್ರಮಿಸಿದೆ. ಕನ್ನಡ ಜನತೆಯ ಕ್ಷೇಮಕ್ಕಾಗಿ ಹಲವು ಹತ್ತು ಬಗೆಯ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಹಮ್ಮಿಕೊಂಡು ಕಾರ್ಯಗತಗೊಳಿಸುತ್ತಿದೆ. ಈ ಎಲ್ಲಾ ಕಾರ್ಯಗಳ ಸಿಂಹಾವಲೋಕನಕ್ಕೆ ರಾಜ್ಯೋತ್ಸವ ದಿನ; ಪ್ರಶಸ್ತ ದಿನ.

ಈ ಎಲ್ಲ ಸಾಧನೆಗಳಿಗೆ ಜನತೆಯೇ ಕಾರಣ ಎಂಬುದು ಸರ್ಕಾರದ ದೃಢವಾದ ನಂಬಿಕೆ. ಜನತೆಯ ಕಲ್ಯಾಣದ ಬಗ್ಗೆ ಕಳಕಳಿಯುಳ್ಳ ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಈ ಆನಂದದ ಸಂದರ್ಭದಲ್ಲಿ ಎಲ್ಲ ಕನ್ನಡಿಗರಿಗೂ ತನ್ನ ಶುಭಾಶಯಗಳನ್ನು ಕೋರುತ್ತದೆ. ಒಟ್ಟು ಸಮಾಜದ ಅಗತ್ಯಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಧೋರಣೆಗಳನ್ನು ರೂಪಿಸಿ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಅನುಷ್ಠಾನಕ್ಕೆ ತರಲು ಬದ್ಧವಾಗಿದೆ ಎಂಬ ಅಂಶವನ್ನು ಮನರ್ದೃಢೀಕರಿಸುತ್ತದೆ.

ಜನತೆಗೆ ಅಧಿಕಾರ:—ಜಿಲ್ಲಾ ಪರಿಷತ್ತುಗಳನ್ನು ರಚಿಸುವುದರ ಮೂಲಕ ಮಹಾತ್ಮ ಗಾಂಧೀಜಿಯವರ ಕನಸು ನನಸಾಗಿದೆ. “ಜನತೆಯ ಕೈಗೆ ಅಧಿಕಾರ”—ಇದು ಈಗ ಕಾರ್ಯರೂಪಕ್ಕೆ ಬಂದಿದೆ. ಮತ ಚಲಾಯಿಸಲು ವಯೋಮಿತಿಯನ್ನು ಇಳಿಸುವುದು ಮಹಿಳೆ ಯರಿಗೆ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಜಾತಿ—ಜನಾಂಗದವರಿಗೆ ಮೀಸಲಾತಿ ಮುಂತಾದ ಅನೇಕ ಚುನಾವಣಾ ಸುಧಾರಣೆಗಳು, ಆಡಳಿತ ವಿಕೇಂದ್ರೀಕರಣದ ಆಶಯವನ್ನು ನಿಜವಾಗಿ ಅರ್ಥಪೂರ್ಣವಾಗಿಸಿ ಪ್ರಜಾಪ್ರಭುತ್ವ ತತ್ವವನ್ನು ಸಾರ್ಥಕಗೊಳಿಸಿದೆ.

ಸ್ಥಳೀಯ ಸಂಸ್ಥೆಗಳ ಚುನಾವಣೆ, ಪ್ರಜಾಪ್ರಭುತ್ವ, ಪದ್ಧತಿಯನ್ನು ಪುನರ್ ಚೈತನ್ಯಗೊಳಿಸಿದೆ. ‘ಲೋಕಾಯುಕ್ತ ರಚನೆ’ ಸಾರ್ವಜನಿಕ ಬದುಕಿನಲ್ಲಿ ಪ್ರಾಮಾಣಿಕತೆಯನ್ನು ತರುವ ದಿಶೆಯಲ್ಲಿ ಒಂದು ವಿನೂತನ ಪ್ರಯತ್ನ. ಆಡಳಿತ ಎಲ್ಲಾ ಹಂತಗಳಲ್ಲೂ ಕನ್ನಡ ಬಳಕೆಯಿಂದ ಆಡಳಿತವನ್ನು ಜನರ ಸಮೀಪಕ್ಕೆ ತರಲಾಗಿದೆ. ಕಲೆ, ಸಂಸ್ಕೃತಿ ಮತ್ತು ಕ್ರೀಡಾ ಕ್ಷೇತ್ರಗಳಲ್ಲಿ ಆಗಿರುವ ಪ್ರಗತಿ ಕಣ್ಣಿಗೆ ಕಾಣುವಂಥದು.

ಭೀಕರ ಬರಗಾಲ:—ಕಳೆದ 5 ವರ್ಷಗಳಿಂದ ರಾಜ್ಯದಲ್ಲಿ ಹಿಂದೆಂದೂ ಕಂಡರಿಯದ ಭೀಕರ ಬರಗಾಲ. ಬರಪೀಡಿತರಿಗೆ ಸಕಾಲಿಕ ನೆರವು ನೀಡಲು ಸರ್ಕಾರ ಲಭ್ಯವಿರುವ ಸಂವನ್ಮೂಲಗಳನ್ನು ವ್ಯವಸ್ಥಿತವಾಗಿ ಬಳಸಿದೆ, ಬರಪರಿಹಾರ ಕಾರ್ಯಗಳು ಸಮಸ್ಯೆಯನ್ನು ಪರಿ ಪರಿಸುವುದರ ಜೊತೆಗೆ ಶಾಶ್ವತ ಸಾರ್ವಜನಿಕ ಆಸ್ತಿ ನಿರ್ಮಾಣಕ್ಕೂ ನೆರವಾಗಿದೆ. ಇಂಥ ವಿಷಯ ಪರಿಸ್ಥಿತಿಯಿಲ್ಲೂ ಸರ್ಕಾರ ಪ್ರಗತಿಪರ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಕಡೆಗಣಿಸಿಲ್ಲ.

ನೀರಿಗಾಗಿ ಶೋಧ:—1983 ಮತ್ತು 1987ರ ಅವಧಿಯಲ್ಲಿ 1104 ಹಳ್ಳಿಗಳಿಗೆ ನಲ್ಲಿಗಳ ಮೂಲಕ ನೀರನ್ನು ಒದಗಿಸಲಾಗಿದೆ. ಮತ್ತು 47391 ಕೊಳವೆ ಬಾವಿಗಳನ್ನು ತೋಡಲಾಗಿದೆ.

ಹಸಿರು ಕಾರ್ಡು ಯೋಜನೆ:—ಬಡವರು ಆಹಾರ ಧಾನ್ಯ ಮತ್ತು ಬಟ್ಟೆಗಳನ್ನು ರಿಯಾಯಿತಿ ದರಗಳಲ್ಲಿ ಕೊಳ್ಳಲು, ‘ಹಸಿರು ಕಾರ್ಡು’ ಒಂದು ವರದಾನ, 30 ಲಕ್ಷಕ್ಕೂ ಹೆಚ್ಚು ಕುಟುಂಬಗಳಿಗೆ ಇದರ ಪ್ರಯೋಜನ.

ಅಗತ್ಯವುಳ್ಳವರಿಗೆ ನೆರವು:—ಆಸರೆಲ್ಲಿದೆ ಅನಾಥ ವಿಧವೆಯರಿಗೆ ‘ವಿಧವಾ ಮಾಸಾಶನ’, 3,64,000. ಫಲಾನುಭವಿಗಳಿಗೆ ತಿಂಗಳಿಗೆ 50 ರೂ.ಗಳ ಮಾಸಿಕ ನೆರವು; ಕೃಷಿ ಕಾರ್ಮಿಕ ಗರ್ಭಿಣಿ ಸ್ತ್ರೀಯರಿಗೆ 3 ತಿಂಗಳ ಅವಧಿಗೆ, ಮಾಸಿಕ 100 ರೂ.ಗಳ ಹೆರಿಗೆ ಭತ್ಯೆ. ಬಡವರು ಕಡಿಮೆ ಖರ್ಚಿನಲ್ಲಿ ಮದುವೆ ಮಾಡಲು ಅನುಕೂಲವಾಗುವ ‘ತಾಳೀಭಾಗ್ಸ್’ ಯೋಜನೆಯಿಂದ ಸಾವಿರಾರು ಬಡ ಕುಟುಂಬಗಳಿಗೆ ಸಾಲದ ಹೊರೆಯಿಂದ ಬಿಡುಗಡೆ.

ಉಚಿತ ಪಠ್ಯ ಪುಸ್ತಕ ಮತ್ತು ಸಮವಸ್ತ್ರ:—ಬಡವರ ಮಕ್ಕಳಿಗೆ ಶಿಕ್ಷಣ ಸೌಲಭ್ಯ ವಿಸ್ತರಣೆಯ ದಿಶೆಯಲ್ಲಿ ಉಚಿತ ಪಠ್ಯ ಪುಸ್ತಕ ಮತ್ತು ಸಮವಸ್ತ್ರ ವಿತರಣೆ ಕ್ರಾಂತಿಕಾರಿ ಹೆಜ್ಜೆ, ಇದರಿಂದ ರಾಜ್ಯದ 70 ಲಕ್ಷಕ್ಕೂ ಹೆಚ್ಚು ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಉಚಿತ ಸಮವಸ್ತ್ರ ಮತ್ತು 165 ಲಕ್ಷಕ್ಕೂ ಹೆಚ್ಚು ಮಕ್ಕಳಿಗೆ ಉಚಿತ ಪಠ್ಯ ಪುಸ್ತಕ ಲಭ್ಯ.

ಒಣ ಬೇಸಾಯಾಭಿವೃದ್ಧಿ:—ಮಳೆಯನ್ನು ಆಧರಿಸಿದ ರಾಜ್ಯದ ಸುಮಾರು ಶೇಕಡಾ 80ರಷ್ಟು ರೈತರಿಗೆ ನೆರವಾಗುವುದು, ಈ ಯೋಜನೆಯ ಉದ್ದೇಶ. ನೀರಿನ ಸಮರ್ಪಕ ಬಳಕೆಯ ವ್ಯವಸ್ಥೆ, ಕಡಿಮೆ ವೆಚ್ಚ, ಅಧಿಕ ಉತ್ಪಾದನೆ, ಕೃಷಿ ಮತ್ತು ಪಶುಸಂಗೋಪನೆಗಳ ಪೂರಕ ಬೆಳವಣಿಗೆ ಇವು ಈ ಯೋಜನೆಯ ವ್ಯಾಪ್ತಿಗೆ ಬರುವ ಪ್ರಮುಖ ಅಂಶಗಳು. ಈ ಯೋಜನೆಯಡಿಯಲ್ಲಿ 1,11,549 ಹೆಕ್ಟೇರ್ ಕೃಷಿ ಭೂಮಿ ಮತ್ತು 11,396 ಹೆಕ್ಟೇರ್‌ಗಳಷ್ಟು ಕೃಷಿಗೆ ಯೋಗ್ಯವಲ್ಲದ ಭೂ ಪ್ರದೇಶವನ್ನು ಅಭಿವೃದ್ಧಿಗೊಳಿಸಲಾಗಿದೆ.

ಸಾಮಾಜಿಕ ಅರಣ್ಯ:—1983ರಿಂದ ಕಾರ್ಯಗತವಾಗುತ್ತಿರುವ ಸಾಮಾಜಿಕ ಅರಣ್ಯ ಯೋಜನೆಯಿಂದ 23,757 ಹೆಕ್ಟೇರ್‌ನಷ್ಟು ಭೂಪ್ರದೇಶ ಹಸಿರಾಗಿದೆ. ಗಿಡ ನೆಟ್ಟು ಬೆಳೆಸುವ ಆಸಕ್ತಿಯುಳ್ಳ ಜನರಿಗೆ ಸಸಿ ಮತ್ತು ಸಲಹೆಯನ್ನು ಉಚಿತವಾಗಿ ಒದಗಿಸಲಾಗುತ್ತದೆ. ಈ ವರೆಗೆ 3300 ಲಕ್ಷ ಸಸಿಗಳನ್ನು ನೆಡಲಾಗಿದೆ.

ಕೈಗಾರಿಕಾ ಕ್ಷೇತ್ರದ ಒಂದು ಮಹತ್ತರ ಸಾಧನೆಯೆಂದರೆ ಕೈಗಾರಿಕೆಗಳ ವಿಕೇಂದ್ರೀಕರಣ—ಪರಿಣಾಮವಾಗಿ ರಾಜ್ಯದಾದ್ಯಂತ ಕೈಗಾರಿಕೆಗಳು ವಿಕಾಸವಾಗಲು ಮುಕ್ತ ವಾತಾವರಣ.

ಕರ್ನಾಟಕದಲ್ಲಿ ಈಗ ಹೊಸ ಮತ್ತು ಕ್ರಾಂತಿಕಾರಿ ಕಾರ್ಯಕ್ರಮಗಳು. ಜನತೆಯ ಬದುಕಿನ ಗುಣಮಟ್ಟವನ್ನು ಸುಧಾರಿಸುವುದೇ ಈ ಎಲ್ಲ ಕಾರ್ಯಕ್ರಮಗಳ ಗುರಿ. ಈ ಐತಿಹಾಸಿಕ ದಿನದಂದು ಜನತೆಯ ಸೇವೆಗೆ ಸರಕಾರ ಸದಾ ಕಂಕಣಬದ್ಧ ಎಂಬುದನ್ನು ಮತ್ತೊಮ್ಮೆ ದೃಢಪಡಿಸುತ್ತದೆ.

ಕರ್ನಾಟಕ ನಾರ್ತ್

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Front Cover : SMALL INDIAN PRATINCOLE (Glareola lactea)

Photo by : K.S. HARSHAVARDHANA BHAT