

CONSERVATION PLAN

Granite Mining Project of M/s. Tirupati Earth and Project Works Pvt. Ltd. having Plot No. 64 over an area 1.41 Ha. located near Village- Richmaliya, Tehsil: Pisangan & District: Ajmer (Raj). As per during primary survey one schedule I species were observed namely Peacock (***PAVO CRISTATUS***), conservation plan for following Schedule I species (as per wildlife conservation act 1972) is being prepared:

A. Conservation Plan for PEACOCK (***PAVO CRISTATUS***)

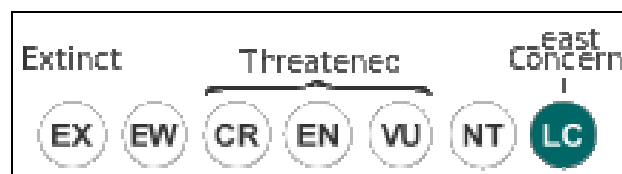
1. Introduction

The Indian Peafowl (*Pavo Cristatus*) has been an integral part of the people of the India and their culture for centuries. From religion and mythology to civilization and socio-culture, the Indian Peafowl occupies an important place in the lives of the people. In addition to this, the Indian Peafowl is well recognized for its ecological and aesthetical values, and hence aptly declared as the 'National Bird' of India in the year 1963.

Since the early 1990s, there have been reports of increasing illegal trade in peafowl feathers, large-scale mortalities due to increased use of insecticides/pesticides in agricultural lands, poaching, and retaliatory killings by people. Several peafowl stronghold areas in the country are now concerned about the current declining status.

A detailed biological survey of the core zone and buffer zone (10 km radius from periphery of the mining lease) was carried out giving details of flora and fauna. As the Authenticated list of Flora & Fauna issued by DCF, Chittorgarh (Raj.) vide letter No. F () Survey/DCF/2020-21/1764 dated 14/03/2022, mentioned Peacock which is in schedule-I of the Wild Life (protection) Act 1972 accordingly a Conservation Plan for the same is prepared.

Status: The Indian peafowl is listed as of Least Concern species in the Red List of International Union for Conservation of Nature (Bird Life International 2008). This bird recognized under Schedule- I (Section- III) species of Indian Wild Life Protection Act, 1972.



Least Concern (IUCN 3.1)

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2. CLASSIFICATION OF PEACOCK (PAVO CRISTATUS)



Table 1.1: Classification of Peacock

S. No.	CLASSIFICATION	DETAILS
1	Kingdom	Animalia
2	Phylum	Chordata
3	Class	Aves
4	Order	Galliformes
5	Family	Phasianidae
6	Subfamily	Phasianidae
7	Genus	Pavo
8	Species	Pavo cristatus
9	Vernacular Name	“Mor” or “Peacock”

3. GENERAL DESCRIPTION

Peacock or Indian peafowl (*Pavo cristatus*) is a familiar and universally known large pheasant. It is the National bird of India. The term “Peacock” is commonly used to refer to birds of both sexes. Technically, males are “**Peacock**”, females are “**peahens**” and together they are called peafowl. The male has a spectacular glossy green long tail feathers that may be more than 60 percent of the birds total body length. These feathers have blue, golden green and copper colored acelli (eyes). The long tail feathers are used for mating rituals like courtship displays. The feathers are arched into a magnificent shape across the back of the bird and almost touching on both sides. Females do not have these graceful tail feathers. They have the fan like crest with whitish face and throat, chestnut brown crown and hind neck, metallic green upper breast and mantle, white belly and brown back rump and tail. Their primaries are dark brown.

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4. Distribution:-

The natural range of Indian Peafowl is essentially the Indian Subcontinent, with India covering a vast majority of its range from the outer Himalaya (up to 2000m) through much of the country including the peninsula. Other countries where the species still survives in good numbers are Nepal and Sri Lanka, while there are only two populations in Pakistan, it is rare in Bhutan and possibly extinct in Bangladesh. It has been introduced in Andaman Island (Ali & Ripley 1980).

5. Habitat and Behavior

It is a bird of scrub-jungles and forest edges, showing affinity to moist and dry deciduous and semi-arid biomes. It is also found in agriculture fields, along streams with good vegetation and close to human habitation in a semi-feral condition (Johnsgard 1986). It roosts on trees and also uses tall buildings where trees are scarce. It generally prefers a habitat mosaic of scrub and open areas, with adequate sites for dust bathing and lekking, a phenomenon where males are known to congregate in open areas for displaying to attract females (Yasmin & Yahya 1996). Dust bathing is critical as this bird has to condition its feathers and remove feather-degrading bacteria and other external parasites. It is likely that the availability of such habitats partly explains the relatively high abundance of this species in semiarid and flood plains.

6. FEATURES OF PEACOCK (PAVO CRISTATUS)

Table 1.2: Features of Peacock

Body Length	180-230 cm
Weight	Weight 2750-6000 gm
Habitat	In the undergrowth in deciduous forests, near streams, tall trees for roosting

Roosting Size of the male tail feathers, its coloration and numbers of eyes present determine the dominance of the male in peacock hierarchy. The females are believed to be attracted towards the male with longest and most colorful tail feathers.

Peacocks are gregarious by nature. In the breeding season they are usually seen in small parties of one male with three to five females whereas in the non-breeding season they remain in separate parties of adult males and females with juveniles. Peacocks roost in tall trees and emerge from the dense thickets to feed in fields and openings in forests and fields.

7. Life Cycle

FEATURES OF LIFE CYCLE

Table 1.3: Features of Life cycle

Call	Kee-ow, Kee-ow, Ka-an, Ka-an, Kok-kok, Kok-kok, cain-kok
Breeding	April-September
Nest side	On ground in undergrowth (wild), On buildings by semi-feral birds in villages

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8. Breeding

Peafowl normally reach breeding age at two years. Peahens will sometimes lay fertile eggs as yearlings. They will lay these eggs late in the summer after they have turned one year old. The best chance for a yearling hen to lay eggs is when she is in the same pen as a mature male. A mature male is a peacock which is at least three years old. The peacock will molt the tail in late summer and this is when the breeding season will end. A two year old peacock that has a one to two foot long tail train will be a better breeder at this age than a peacock of the same age that doesn't have a tail train of any size.

A mature peacock in prime condition can be mated to as many as five peahens. The eggs are light brown in color and are similar in size to turkey eggs. If the eggs are collected from the nest for artificial incubation, a peahen may lay as many as thirty eggs. Peahens which are allowed to roam freely about a farm will hide their nests in tall grass, around shrubs, and in brush piles. The nest is a depression scratched out in the ground and lined with grass. Nests in such locations are many times destroyed by possums, raccoons, and skunks which will eat the eggs.

9. Threats

- The Indian peafowl is under threat from various quarters that include the demand for feathers and wild meat, conflict with farmers during cropping season, increased use of chemical fertilizers and pesticides, and habitat degradation.
- Habitat degradation and loss – more significantly from conversion of their habitat to agriculture, habitation and industrial growth, poisoning to counter crop damage, consumption of eggs and fat extracts for alleged medicinal values, and killing for wild meat.
- Although these threats are believed to be causing an alarming decline in population, the magnitude and pattern of the effects in project study area are yet to be quantified.
- Shortage of drinking water for the birds during the hot summer days.
- Habitat loss, especially the shortage of tall tree in and around the villages for roosting and for providing shades during hot summer month.
- Causalities caused by eating chemically treated agricultural crop seeds.
- Legal hunting by some communities.

10. Food Habit

Peacocks are ground feeders. Indian peafowl's do most of their foraging early in the morning and shortly before sunset. They retreat to the shade and security of the trees for the hottest portion of the day. They make a meal of grains, berries, drupes, wild figs and some cultivated crops. They can also eat insects, small reptiles and small mammals.

11. Conservation and Relationship with man

The great beauty and popularity of the Indian Peafowl has ensured its protection throughout most of its native ranges. It is a national bird of India. The Peafowl is prominent in the mythology and folklore of the Indian people. The Hindus consider

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the bird to be scared because of its association with Lord Krishna who used to wear its feathers as crown (Mor Mukut). It is also associated with the God Kartikeya, son of the Lord Shiva and Parvati and brother of Lord Ganesh. It is “Vaahan” (transport) of Lord Kartikeya. This long and close association with humans has proven the peafowl’s adaptability of human- altered landscapes. In villages where it is protected it becomes quite tame, but it is very shy and secretive where hunted. Peacock is generally protected by the local people.

12. Conservation Status

IUCN	Others
Wild Life (P) Act	Schedule-I
CITES	Not Listed

12.1 Action plan for Conservation of peafowl: -

- Mapping of habitat and distribution status of the species across the 10 km radius from project site.
- Time series analysis of habitat change to quantify the rate of change and identify high risk areas and potential sites for further affirmative action.
- Estimation of population size by established count method such as line transect, call counts and roost counts.
- Intensive ecological investigation in representative sites in major biogeography zone with focus on the effects of threats in relation to breeding success and survival probability.
- Quantification of trade, with details on source and people involved.

12.2 Conservation Measures for peacock: -

Direct and indirect approach is required to provide effecting conservation, which is suggested as under:

- Increase the tree cover in the buffer area shelter and roosting of peacocks. This will be achieved by planting of tree groves (a group of trees grows close together, generally without many bushes or other plants) in buffer area.
- Some local species such as Neem, Shesham, Jamun, Pipal tree etc. will be planted. Planting of tree groves in school compounds in the villages of buffers area as per the plantation programme.
- By conducting awareness programmes (community and school level) for conservation of peacocks in the area and also through organizing competitions during “Wildlife Week” and “Van Mahotsav” celebrations.
- Encourage Afforestation activities around close to peafowl habitation. The selection of plant species will be based on requirements of peafowl roosting, food, shelter.
- Organized seminar, conferences, poster presentation at school and Gram Panchayat level around peafowl habituation area with discussed on aware local people about not kill this bird for meat, feathers. Protect it birds to wild dog and his eggs to predators.
- Some provision of rewards to informers for the control of poaching and illegal trade in wildlife.

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- Peafowl have culture value in India with associated to God of Krishna, Kartikaya. Its feathers are used to various festivals like Deepawali. Encourage the local people to give his contribution in protection of peafowl. It is necessary to aware local people to his cultural value.
- Small water tank should be constructed in habitation zone of Peafowl and its water quality should be maintained.
- Suggest strategies to minimize negative impacts of changing environment in nearby area of peacock population and to promote conservation of peacock habitats.
- Encourage local farmer to use bio-pesticide, bio-fertilizer and vermicomposting in agriculture practices.
- Another way to help preserve the endangered species is to create society dedicated to ecological ethics. All the conservation measures will be implemented with the help of and in the consultation of the state forest department.
- With the objective of effectively protecting the wild life and to control poaching, smuggling and illegal trade in wildlife and its derivatives the government of India enacted Wild Life (Protection) Act 1972. The act was amended in January 2003 and punishment for offences under the Act has been made more stringent.

Table: Biodiversity Budget for conservation

Sr. No.	Item	Percentage of total outlay of wildlife conservation plan
1	Habitat improvement & mitigative measures (Food, water , shelter , movement etc) and measures to reduce / minimize the human - animal conflicts	2,85,250
2	Awareness and Extension (Forest staff will also be invited for various activities to ensure participation)	57,050
3	Support to forest department for monitoring, rescue & rehabilitation of wildlife (Veterinary care, animal health, rescue, tools and equipment etc.)	57,050
4	Contribution toward conservation of wildlife in PAS (To be deposited in RPACS)	57,050
5	Administration Cost for processing inspection etc. (To be deposited in RPACS)	57,050
6	Miscellaneous including Eco - development	57,050
Total		5,70,500
<p><i>*The PP has proposed Rs 5.705 lakhs for Schedule I (Peacock) conservation for the first year of mining and will invest for the remaining years as per approved by the Chief Wildlife Warden.</i></p>		