

Species : (i). *cristatus* (L. 1758)

(i). *congensis* (Chapin 1936)

(ii). *muticus* (L. 1766)

The Peafowl is an exotic bird in many parts of the world and it is native of India, Assam, Siam, Burma, Java, Ceylon and Malaya (Kushwaha and Kumar, 2016). Three species of Peafowl are found in different parts of the World (Dharmakumarsinhji and Lavkumar, 1981).

(i). *Pavo cristatus*, also known as blue Peafowl or Indian Peafowl, occur in Indian Subcontinent. They are threatened species.

(ii). *Pavo muticus*, also known as green Peafowl, found from eastwards to Sumatra. Now they are endangered species.

(iii). *Afropavo congensis*, also known as Congo Peafowl or African Peafowl, occur in Belgian, Congo. They are vulnerable species.

The Peafowl is widely distributed in India sub-continent, from the south and east of the India river, Jammu and Kashmir, East Assam, South Mizoram and the whole of the Indian peninsula (R. Sabesh, 2010). The population is very high in Mathura, Chitrakoot, Rajasthan, Madhya Pradesh, Agra, Kanpur, Sitapur, Lucknow etc. while some districts are reported that population is decline in Lalitpur and Jhansi (Ali and Repley, 1989). The breeding season of the Indian Peafowl is not fixed and it may breed any time of the year but they likes rainy seasons for breeding (Munir et.al., 2018).

II. Materials And Methods

The field observation on Indian Peafowl were conducted during the months of September to December 2018. The survey sites included 2 km. radius of Kapoori village, Saharanpur, U.P., India in natural condition, which latitude is 29.785258° and longitude is 77.7373396° and 269 meters above the sea level. Peafowls were visually observed by binoculars (GOR Standard 10×50). The observations were recorded in the early morning and early evening hours.

III. Result And Discussion

Peacocks are omnivorous, ground-feeders that eat insects, reptiles, worms, seeds, grains and fruits (Harikrishnan et al., 2010). Even in their natural range, these birds roam in villages, cities, parks and near human societies in search of food. Sometimes they damage agriculture crops but they also eat locusts, rats small snakes and grasshoppers, which is beneficial to farmers. Animal body has to perform different mechanical activities for which they need energy derived from food (Okoro et al., 2016). Elliott et al., 2014 reported that nutrients are required from food to maintain body structure and growth. Charlton et al., 2015 and Nowak et al., 2016 studied that insects are good source of protein while plants are enriched in calcium level that is essential for egg production. Johnsingh and Murali, 1980 had mentioned similar findings on feeding association between Indian Peafowl and King crow. Yasmin and Yahya 1996, recorded that Indian Peafowl fed on a mixture of seeds, leaves and wild herbs.

In the present study, It was observed that female peafowl spend more time on feeding then male but at the time of heavy rain mostly peafowl do not like feeding and also noted that they feed on grains so known as granivorous and because in the agronomic ecosystem they mostly feed on paddy (Sathyanarayana et. al., 2005). In 1981 similar observation were recorded by K. Navaneethakannan were noted that Peafowl spend maximum time in feeding activity in comperision to other activities. In 2010 Jones and Dawkins reported that female Peafowl spent most of the time in feeding, moving, resting guarding and other behavior. Ali and Ripley (1983) had reported that large birds used tall trees and small birds need small trees for roosting. Kushwaha and kumar (2016) observed that Indian Peafowl preferably roosted on top of the tall trees so that they could get vision from all directions and they generally selected the tallest trees for roosting in order to protect themselves from the free climbing, night predators such as the leopard and other cats. Also worked on diet preferences and general behavior of peafowls in captive environment by Praveen et. al., 2018.

In this study, Indian Peafowl were observed to fed on leaves, flowers and fruits of different plants such as wheat, matar, paddy, mustard, bathua, pear, pilkhan, maize, carrot, tomato, cucumber, watermelon, brinjal, potato etc., also like to fed on small animals like ant, earthworm, lizard, snake, beetles, termite etc and they would like to eat seasonal grains, fruits, vegetables, crops etc. Similar kind of observation also recorded by Kaur and Kler in 2017. The variety of food is required in captive environment for birds as recommended by Central Zoo Authority (Raja, 2007) and 30 gm. Bread, 30 gm onions and garlic, 100 gm spinach, 60 gm oil seeds and small insects, worms and animals in captive conditions (Sikandar et al., 2015). Junaid Naseer et al., 2018, investigated that major portion of faecal contents were of plant materials as compared to animal contents. Small size pieces of the sand and gravel (known as non-food materials) were seen in the faecal matter that help in improvement of their digestive system. Previous studies showed that more than 32% of faecal contents were composed of non-food items (Trivedi and Johnsingh 1995).

References

- [1]. Ali S, Ripley SD. (1969). Handbook of the birds of India and Pakistan. Vol III. Oxford University Press, Bombay, India.
- [2]. Ali S, Ripley SD. (1983). Handbook of the birds of India and Pakistan. Compact Edition, Oxford University Press, Mumbai.
- [3]. Ali S, Ripley SD. (1989). Handbook of the birds of India and Pakistan. Second edition. New Delhi: Oxford University Press.
- [4]. Charlton, A., Dickinson, M., Wakefield, M., Fitches, E., Kenis, M., Han, R., Zhu, F., et al. (2015). Exploring the chemical safety of fly larvae as a source of protein for animal feed. *J. Insects Food Feed.*, 1: 7-16.
- [5]. Chopra G and Kumar T (2012). Study of feeding and roosting sites of Blue Peafowl, *Pavo cristatus* Linnaeus, 1958 in district Kurukshetra, Haryana (India). *Journal of Biological and Chemical Research*, 29(2): 273-282.
- [6]. Dharmakumarsinhji RS and Lavkumar KS (1981). Indian peafowl, Sixteen Indian birds, Publication division, Ministry of Information and broadcasting, Government of India, 24-28.
- [7]. Drisdelle G. (2007). Living with peafowl, dedicated to quality service, City of Dunedin. Florida.
- [8]. Elliott, K. H., Vaillant, M., Kato, A., Gaston, A.J., Ropert Coudert, Y., Hare, J.F., et al (2014). Age related variation in energy expenditure in a long lived bird with in the envelope of an energy ceiling. *J. Anim. Ecol.*, 83: 136-146.
- [9]. Hanotte, O., Burke, T., Armour, J. A. (1991). Hypervariable minisatellite DNA sequences in the India peafowl *Pavo cristatus*. *Genomics.*, 9:587-597.
- [10]. Harikrishnan, S., Vasudevan, K., Sivakumar, K. (2010). Behavior of Indian peafowl (*Pavo cristatus*) Linn. 1758 during the mating period in a natural population. *Ornithol. J.*, 3: 13-19.
- [11]. IUCN. (2008). *Pavo cristatus*. In: Red List of Threatened Species, IUCN.
- [12]. Johansingh, AJT and Murali, S (1980). The ecology and behavior of the Indian peafowl (*Pavo cristatus*) Linn. Of Injar. *Journal Bombay Natural History Society*, 75(3): 1069-1079.
- [13]. Jones, T.A. and Dawkins, M.S., (2010). Effect of environment on Pekin duck behavior and its correlation with body condition on commercial farms in the UK. *Br.Poult. Sci.*, 51: 319-325.
- [14]. *Journal of wildlife and esearch.* 4: 42-59.
- [15]. Junaid Naseer, Anjum, K.M., Munir, M.A., Nazir, M.A., Yousaf, M.Z., Naseer, O., Anjum, A., Khan, A. U., Akbar, M.T., (2018). A study on Indian peafowl (*Pavo cristatus*) emphasizing breeding session and feeding behavior in captivity. *Indian J. Anim. Res.*, 52(11): 1664-1666.
- [16]. Kaur, S., Kler, T. K., (2017). Feeding habits and roosting preferences of Indian Peafowl (*Pavo cristatus*) in Ludhiana Distt. (Punjab). *Journal of entomology and zoology studies*, 5(4): 1693-1696.
- [17]. Kushwaha, S. and Kumar, A., (2016). A review on Indian Peafowl (*Pavo cristatus*) Linnaeus, 1758, *Journal of wildlife research*, October-December, Vol. 4 issue 4, Pages 42-59.
- [18]. Munir, M.A., Yousaf, M.Z., Naseer, O., (2018). A study on Indian Peafowl (*Pavo cristatus*) emphasizing breeding seasoneding behavior in captivity. *Indian J. Anim. Res.*, 52(11): 1664-1666.
- [19]. Navneethakannan K. (1981) Activity patterns in a colony of peafowl (*Pavo cristatus*) in nature. *Journal Bombay Natural History Society.* 81(2): 387-393.
- [20]. Nowak, V., Persijn., Rittenschober, D. and Charrondiere, U.R. (2016). Review of food composition data for edible insects. *Food Chem.* 193: 39-46.
- [21]. Okoro, V., Nwokeocha, A., Ijezie, C., Mbajiorgu, C. and Mbajiorgu, E. (2016). Effect of varying dietary supplemental inclusion levels of onion and garlic on semen quality characteristics of Hubbard white breeder broiler cocks aged 35-41 weeks old Indian J. *Anim. Res.*, 50: 922-929.
- [22]. Parasharya BM and Mukherjee A. (1999). A roosting behavior of Indian Peafowl *Pavo cristatus*. *ournal of Bombay Natural History Society.* Vol. 96(3): 471-472.
- [23]. Praveen, Z., Sidra, S., Khan, N.B., (2018). Diet preferences and general behavior of Peafowls in captive environment. Vol. 33(1): 16-21.
- [24]. Raja, A., (2007). Zoos in India. Central Zoo Authority, India.
- [25]. Sabesh R (2010). The Peacock our national bird. *Eco News*, 16(2): 5-7.
- [26]. Sathyanarayana M.C. (2005). Impact on the Indian Peafowl (*Pavo cristatus*) on agricultural Ecosystems, *Envis Bulletin, wildlife and protected areas*, 175-176.
- [27]. Sikandar, S.K., Ali, Z., Nemat, A., Ahmad, S., Hussain, Z., Saleem, K. and Khan, M.N.,(2015). Diet provision for zoo animals in captive conditions of Lahore Zoo, Pakistan. *J. Anim. Plant Sci.*, 25: 493-499.
- [28]. Thaker JP (1963). Peacock: the national bird of India. *Journal of the Oriental Institute, Baroda.*
- [29]. Thapar V (1998). Land of the Peacock: A natural history of the Indian subcontinent. University of California Press.
- [30]. Trivedi, P. and Johnsingh, A. (1995). Diet of Indian Peafowl *Pavo cristatus* Linn. *Gir Forest Gujrat. JBNHS* 92: 262-263.
- [31]. Yasmin S, Yahya HAS. (1996). Feeding habits and crop damage by Indian Peafowl. *World Pheasant Association.* 2: 8-9.