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SHORT COMMUNICATION

## Threats to the Habitat and Population of Lapwings

Subhalakshmi Rout

Department of Life Sciences, Rama Devi Women's University, Bhubaneswar, Odisha, India

Email-Id: subhalakshmirout98@gmail.com

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Lapwings belonging to the family Charadriidae are ground-nesting birds. They are different from other birds due to their slow, irregular wingbeats in flight and shrilly wailing cry. All the species of lapwings are categorized into 3 different genera namely *Vanellus*, *Hoploxypterus*, and *Erythrogonys*. Pied lapwing and Red-kneed dotterel are the only species belonging to the genus *Hoploxypterus* and *Erythrogonys* respectively and about 23 species of lapwings are found under the genera *Vanellus* (Lok and Subaraj 2009). India is the home to about 7 species of lapwings namely Sociable lapwing, Northern lapwing, River lapwing, Yellow-wattled lapwing, Grey-headed lapwing, Red-wattled lapwing, and White-tailed lapwing; out of which 4 are migratory visiting different parts of the country during winter (Grimmett et al. 2011). Of the 7 lapwings, the Sociable lapwing is critically endangered, Northern lapwing and River lapwing are near-threatened (Majumder et al. 2022). Lapwings are generally found in mainly 2 habitats which are grasslands and wetlands (Figure 1). These two ecosystems are a paradise for the birds, but they are under tremendous stress due to various anthropogenic activities. The lapwings being ground-nesting birds are highly pressurized as their population is declining due to the frequent hampering of their eggs and habitat. Grazing has become a major threat to the lapwing population as they make the grasslands barren which are the preferred breeding site of the birds (Sethi et al. 2011). Urbanization and grazing are the main reasons why we now see unusual lapwing nests around us be it on rooftops, or other places in the human civilization to protect the eggs (Kaur and Khera 2017). It is now clear that the lapwings are in severe need of protection and require our immediate attention. They have particular habitat requirements to aid their nesting and

breeding habits. When they lay eggs, they require vast open spaces with gravelly land to ensure proper incubation of eggs and safeguarding them from predation in the nearby area (Figure 2). They make slight depressions on the land to lay eggs and the eggs of lapwings are generally spotted and camouflaged (Barik et al. 2021; Figure 3). If there are predators or humans nearby then they use diversion tactics with their loud calls and flying far away from breeding places to prevent predators from reaching the eggs (Gupta and Kaushik 2011). After the successful hatching of the chicks, they are able to walk after some days and feed on invertebrates mainly insects in the sparsely vegetated areas. If humans are snatching away the grasslands and wetlands for agricultural practices or construction purposes, they are not only destroying an ecosystem but also hampering the lives of other living creatures (Galbraith 1988). Therefore, there is a need to pay close attention to the needs of these birds and reflect on our activities which greatly impact the life cycle of the birds due to mere habitat changes. Each living species on the Earth is the beautiful creation of God and man must conserve these creations by protecting their habitat and minimizing the threats against them.

### Conservation aspects

As lapwings are found in grasslands and wetlands or banks of rivers, especially River lapwing, there is a need to protect the habitats of lapwings to conserve their population. It can be done by taking some measures like minimizing grazing on grasslands which are home to lapwings, less use of pesticides on crop fields which reduce their insect prey, stopping the



**Figure 1: Habitat of Yellow-wattled lapwing**





**Figure 2: Yellow-wattled lapwing incubating eggs**



**Figure 3: Eggs laid by Yellow-wattled lapwing**

conversion of grasslands and wetlands into agricultural fields or construction sites, decreasing pollution of the waterbodies and wetlands, etc. More focus must be on the creation of more grasslands and wetlands, may it be artificial, to provide a home to the declining population of lapwings.

## REFERENCES

- Barik S, Saha GK and Mazumdar S. (2021). Environmental features influencing Red-wattled Lapwing and River Lapwing in a suburban area of the lower Gangetic plains, West Bengal, India. *Wader Study*. 128(3): 247-254.
- Galbraith, H. (1988). Effects of agriculture on the breeding ecology of lapwings *Vanellus vanellus*. *Journal of Applied Ecology*. 25(2): 487-503. <https://doi.org/10.2307/2403839>
- Grimmett R, Inskipp C and Inskipp T. (2011). *Birds of the Indian Subcontinent: India, Pakistan, Sri Lanka, Nepal, Bhutan, Bangladesh and the Maldives*. Bloomsbury Publishing, London, UK.
- Gupta RC and Kaushik TK. (2011). On the fundamentals of natural history and present threats to Red-wattled Lapwing in Kurukshetra environs. *Journal of Applied and Natural Science*. 3(1): 62-67.
- Kaur M and Khera KS. (2017). On the fundamentals of breeding biology and present threats to red wattled lapwing (*Vanellus indicus*) in agricultural landscape of Punjab. *Journal of Entomology and Zoology Studies*. 5(4): 1501-1506.
- Lok AFSL and Subaraj R. (2009). Lapwings (Charadriidae: Vanellinae) of Singapore. *Nature in Singapore*. 2: 125-134.
- Majumder A, Maheswaran G, Alam I, Chandra K, Alfred JRB and Roy Chowdhury B. (2022). *Birds of India. Zoological Survey of India*. pp: 1-600.
- Sethi VK, Bhatt D, Kumar A and Naithani AB. (2011). The hatching success of ground- and roof-nesting Red-wattled Lapwing *Vanellus indicus* in Haridwar, India. *Forktail*. 27(2011): 7-10.