

The Fascinating Ecology and Behaviour of the Pheasant-tailed Jacana



Dr. Santanu Chowdhury
Faculty
Department of Environmental Science
Asutosh College
santanu.chowdhury@asutoshcollege.in

The Pheasant-tailed Jacana (*Hydrophasianus chirurgus*) stands as an enchanting avian species, known for its remarkable adaptation to the wetland habitats of Asia. The pheasant-tailed jacana, a native breeder in tropical regions like India, Southeast Asia, and Indonesia, shares much of its habitat with the bronze-winged jacana. However, unlike its counterpart, the pheasant-tailed jacana also inhabits Sri Lanka. It prefers lakes of various sizes with abundant floating vegetation for its habitat. With its striking appearance and unique behaviours, this avian gem needs considerable attention to ensure its preservation in the face of

anthropogenic threats and habitat degradation. The Pheasant-tailed Jacana, adorned with vibrant plumage and elongated tail feathers, is a charismatic bird species inhabiting the wetlands and shallow freshwater habitats of South and Southeast Asia. Despite its alluring appearance, this avian marvel faces numerous threats to its existence, underscoring the importance of understanding its ecology and behaviour for effective conservation efforts.

Taxonomy and Distribution: Belonging to the family Jacanidae, the Pheasant-tailed Jacana is classified under the genus *Hydrophasianus* and order Charadriiformes.



Fig 1: Pheasant-tailed Jacana in its breeding plumage (pc: author)



It is listed as *Least Concern (LC)* in the IUCN list with moderate declining pattern found in long term trend analysis. its distribution spans across a wide range, encompassing countries such as India, Nepal, Bangladesh, Myanmar, Thailand, Cambodia, Vietnam, and Indonesia. However, fragmented habitats and habitat loss pose significant challenges to its population viability. It is residential or local migratory across much of its habitat, but northern populations originating from southern China and the Himalayas undertake migrations to Southeast Asia and Peninsular India respectively. The species is more commonly observed at lower elevations, yet during summer some population were found to ventures into the Himalayas, with sightings recorded at altitudes reaching 3650 meters in Kashmir (Vishansar Lake) and 3800 meters in Lahul.

Morphology and Adaptations: The Pheasant-tailed Jacana exhibits remarkable morphological adaptations to its aquatic lifestyle. Notable features include its long toes and slender legs, which enable it to gracefully traverse floating vegetation and navigate shallow water bodies with ease. Its distinctive plumage, characterized by iridescent hues and elongated tail feathers, serves both ornamental and functional purposes, aiding in courtship displays and thermoregulation.

Ecology and Habitat Preferences: As an obligate wetland species, the Pheasant-tailed Jacana relies heavily on shallow freshwater habitats, including marshes, ponds, lakes, and flooded rice fields, for foraging and nesting. The primary food sources for the pheasant-tailed jacana comprise insects,



Fig 2: Preening behaviour of Pheasant-tailed Jacana (pc: author)



mollusks, and various invertebrates gleaned from the floating vegetation or the water's surface. They forage by walking on the vegetation and swimming in the water. Occasionally, they consume filamentous algae, seeds, and plant matter, although this is often incidental. They usually fly low over the water surface but may also mob raptors higher in the air. On landing, they keep their wings open until they find firm footing.

These birds are commonly found in flocks of up to 50 to 100 individuals on water bodies, and they can become quite accustomed to human presence. Their typical call is a mewling "me-onp" or a nasal "teeun" within winter flocks. During the breeding season, males and females emit distinct calls, with several contextual variations. Young birds produce a soft 'cheep' with their bills closed.

Behaviour and Reproductive Biology: The Pheasant-tailed Jacana exhibits intriguing behavioural patterns, including polyandrous mating behaviours, where females compete for territories and mate with multiple males. Nesting behaviours involve the construction of floating nests atop aquatic vegetation, providing protection from predators and flooding.

Parental care is predominantly paternal, with males assuming responsibility for incubation and chick rearing. In the world of jacanas, females typically depart after laying their eggs in search of new mates. In this avian realm, fathers assume full responsibility from building the nest on floating vegetation and incubating the eggs for a period spanning 24 to 26 days.

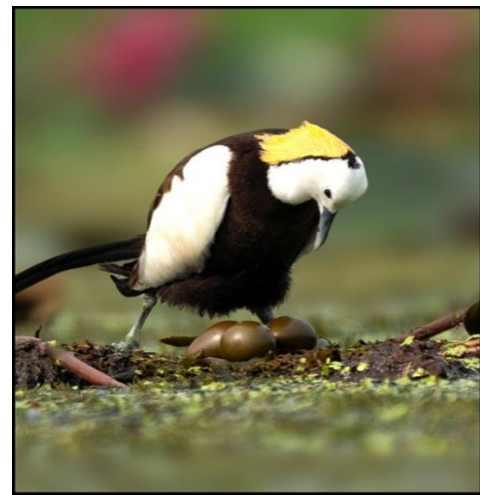


Fig 3: Pheasant-tailed jacanas (Male) looking after a clutch of eggs

These dedicated fathers continue their nurturing role by caring for the chicks for

Conservation Status and Threats: Despite its widespread distribution, the Pheasant-tailed Jacana faces escalating threats from hydrological alterations exacerbate these challenges, necessitating urgent conservation interventions to safeguard its future survival.

Effective conservation of the Pheasant-tailed Jacana requires collaborative efforts encompassing habitat restoration, protected

approximately 6 to 7 weeks until the young birds achieve full independence.

habitat destruction, wetland degradation, pollution, and hunting pressure. Rapid urbanization, agricultural expansion, and area management, community Engagement, and public awareness campaigns. Incorporating scientific research, policy advocacy, and stakeholder participation is paramount for mitigating anthropogenic impacts and promoting coexistence with this emblematic wetland species.



Fig 4: Pheasant-tailed jacana chicks in their natural habitat (pc: author)



Fig 5: Parenting, Pheasant-tailed jacanas (Male) with chicks
(pc: author)

In conclusion, The Pheasant-tailed Jacana showcases the complex connections between ecology, behaviour, and conservation within wetland ecosystems. Its enchanting presence

reminds us of the rich variety of life in these fragile habitats and the urgent need for concerted action to ensure their preservation for future generations.