



HABITAT



Bonelli's Eagle is seen soaring over the agricultural-semi-arid habitat. If prey is sighted, the eagle stoops at it at a tremendous speed.

- **Distribution:** Widespread in the Indian subcontinent. Occurs from sea level up to 2400 m in Himalayas. From Europe, through India to South China.
 - **Status:** Rare. Populations are now declining in South Europe and North Africa.
- **Habitat:** Hills and plains amidst semi-urban, agricultural, open, semi-arid areas. Young eagles disperse in marshes, wetlands, grasslands, coasts and semi-desert country.
 - **Habit:** Aerial, arboreal and terrestrial.
- **Behavior:** Keep in pairs all year. Aggressively guard the territory. Juveniles disperse in 1st or 2nd winter. Usually silent; but vocal during breeding. Call *kie,kie, kie, kik, kik, kik* is given in flight or from a perch. Flight speed is often faster than that of the falcons.

An array of prey items illustrating the hunting ability of this supreme avian predator!

FOOD

Prey is taken in air, from trees or on ground. They hunt in pairs. Lizards, monitor lizard, ducks, geese, cormorants, egrets, herons, domestic fowl, water fowl, Indian Coucal, crows, Shikra, koel, pigeons, doves, quails, francolins, spurfowls, mice, gerbil, squirrel, mongoose, hare, etc. Flesh is eaten with bones.



An aquatic bird.



A Large-billed Crow.



A Cattle Egret.



A quail.

Key Features:

- Hooked bill with festoon to upper mandible.
- Elliptical, oblique nostril.
- Tarsi feathered till toes; latter long, outer longer than inner.
- 4th primary longest.
- Tail more than or equal to wing length.
- Wings extend to center of tail on perch.
- Tail has dark sub-terminal band.
- Wing edges held parallel in flight.
- Black bar through under wings.
- White patch on back.
- White under-body with streaks.
- Leading edge of wings white, trailing edge dark.

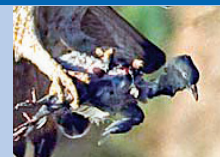


The eagle often takes domestic chicken. This habit angers local farmers and the Bonelli's Eagle is often viewed as an unwanted bird and a pest.



The white patch on the back is diagnostic for the species.

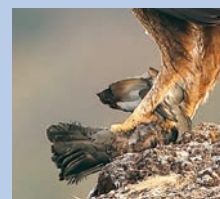
Prey items:



Heron



House Crow



Pigeon



Quail



Squirrel



Mongoose

The Bonelli's Eagle also takes mammalian prey.



A squirrel.



A Black-naped Hare.



A Coucal.

FLIGHT:



Flight views showing broad wings that are held parallel to the body.



The eagle is approaching its nest from the side. Note the vertical stance in flight and the large size of the nest. This nest was in use for six years when the photograph was taken.

Related species:



Booted Eagle
Hieraetus pennatus

(Wing under 450 mm). This is a winter migrant. 'Headlights' on the sides of neck are typical.

The juvenile Bonelli's Eagle (above) may be confused with **Rufous-bellied Eagle** *Hieraetus kienerii*.

Amazing Facts:

Pairs often hunt together. Food is cached in nest. Can take prey heavier than itself. Attack mammals like Common Langur if they venture near the nest. Stoop as fast as a falcon. Falconers once trained the Bonelli's Eagle to catch prey like fox and Chinkra. In one case, the same nest was reused for 30 years stressing the importance of traditional nest sites.

● **Etymology:** *Hieraetus*: Gr. *Hierax*, hawk or falcon; *aetus*, eagle. *fasciatus*, Late L. *fascia*, hand or girdle, refers to the dark terminal tail band. Common name after Prof. F. A. Bonelli (1784-1830). (Reference: Satish Pande (2009). Latin Names of Indian Birds Explained. Book by Ela Foundation. Published by Oxford University Press and Bombay Natural History Society. Pages 1-506. Plus 18 colour plates.)

● **Culture:** In India this eagle was called '**Vartulaksha**' - brilliant eyed and '**Shashaghni**' - devourer of hare.



Bonelli's Eagle perching on the ground. This a common habit.

● **Threats:** Tree felling and quarrying lead to loss of nest sites. Conflict with man due to poultry lifting habit. It is poisoned or hunted for this habit. Clandestine but widespread trade for pets and falconry is ongoing.

● **Protection:** Included under Schedule I of Indian Wild Life (Protection) Act.

● **Conservation:** Nestlings stolen from the nest, if recovered, can be

replaced in nest within 48 hrs and are accepted by parents. Fostering of orphaned nestlings in another empty nest of same species within the post-fledging dependence period was successful. (Pande et al, 2004. *J. Raptor. Res.* 38(4):381-382). Conservation education and meticulous protection of known nest sites with local peoples' participation is the key to conservation of this elegant raptor.



Bonelli's Eagle lifting poultry.



Rehabilitation of 2.5 wk old eaglets.

FACT FILE: BONELLI'S EAGLE; SLENDER HAWK-EAGLE; CRESTLESS HAWK-EAGLE

Hieraetus fasciatus (Vieillot, 1822). Type locality: Montpellier, France.

Naarach (Marathi); **Morangi** (Hindi); **Sansagar** (Gujarati); **Kundeli slalwa** (Telugu); **Rajali** (Tamil).

- **Size:** Length 68 – 72 cm. Weight: 1.4 – 2.4 kg.
- **Wing:** Male - 45.8 to 54.2 cm; Female – 47.8 – 56 cm.
- **Sexual maturity :** Probably after 3 y. Breeding season: November – April.
- **Clutch:** 1 – 2 eggs. No replacement clutch.
- **Eggs:** White, ovoid; 69.1 mm x 53.4 mm. (Baker).
- **Incubation:** 42 – 44 d; Mostly by female, also by male.
- **Fledging:** 62 to 70 d.
- **Bare parts:** Iris- Yellow - orange. Cere and legs – yellow.



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- Amit Pawashe, Shivkumar 'Banda' Pednekar, Kumar Pawar, Unmesh Barbhai, Prashant Deshpande, Niranjan Sant, Avinash Nagare and Satish Pande did field research for 14 years in Maharashtra, India.



Ela File 03

BONELLI'S EAGLE

- **Order:** Falconiformes
- **Family:** Accipitridae
- **Status:** Resident

ELA FOUNDATION



Conservation Through Education & Research

Nesting - Phenology



The female is larger than the male - reversed sexual dimorphism, as seen in most raptors.



A large traditional nest in a tree fork of *Eucalyptus* tree.



A cliff nest.



Eagle carrying fresh green spray to an active nest.



Eggs are laid in a small cup within the large stick nest. This cup is lined by green leaves.



The eagle is preparing to incubate.



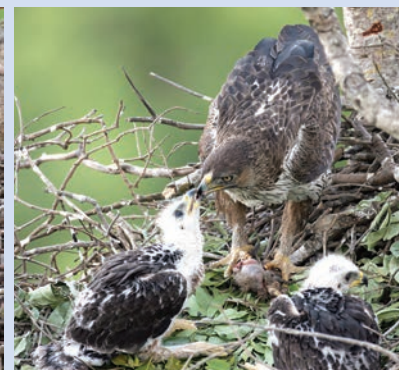
One week old eaglets are caringly fed by the parent.



Nestlings huddled in the cozy nest cup. Note the yellow cere.



Four weeks old eaglets show emerging grey feathers. Parent is seen by their side.



Five weeks chicks. The eaglets can be aged based on the plumage.



Seven weeks old eaglet flapping wings in preparation of its first flight.

Nest site: Recorded to use the same nest for 15 to 30 yr. In tall trees (Jamun, Silk Cotton, Peepal, *Dalbergia*, *Eucalyptus*, Chir Pine, etc.). Also on cliffs in ledge with overhang. Rarely on hill slopes. More than one nest in same territory.

Nest material: Old traditional nests made of sticks and branches can be 2 m wide and 2.5 m high and may crash due to their weight (up to 1 ton). Inner cup is made of green sprays which are added till the nest is active.

Sponsored by: **Shri. Shailendra K. Mhaskar**