

Migratory Bird Whimbrel in Coastal Regions of Karnataka



Dr. S. Shishupala

Professor
Department of Microbiology
Davangere University
Shivagangothri, Davangere
ssdumb@gmail.com

Bird migration is one of the fascinating aspects of biology. Birds do migrate from one place to another in search of better climate to live, ideal place for reproduction and to fetch food and to mate. Some birds may travel short distances, while others are having the capacity to travel round the globe. In several well-known cases, the bird migration is an annual event. Climatic conditions of Karnataka have been considered as one of the favorable regions for several migratory birds from different parts of the world.

One such winter migratory birds to coastal Karnataka is Eurasian Whimbrel. This bird belongs to the family *Scolopacidae*, which comprises of waders or shorebirds. The scientific name is *Numenius phaeopus* L. In Kannada it is referred as *Kadalagorava*. Generally, this bird size matches with country hen measuring 46 cm in length and weighs ~400 gram. In the flight the wingspan ranges up to 83 cm. It is a graceful brownish bird with characteristic long curved, bill. The genus name *Numenius* means 'crescent

moon', referring to its curved bill. Head has got dark crown-stripes with white supercilium. Pale central stripe and dark eye line are also visible. The wings are long and pointed, whereas the tail is short (Fig. 1). Both the sexes look alike and but they can identify suitable partner. Call is repeated musically *tetti-tetti-tetti-tet* and distinctive during the flight. They are generally found either singly or in small numbers (Fig. 2).



Fig. 1. Eurasian Whimbrel in Mattu beach rocks at seashores of Udupi, Karnataka (November 2019).



Fig. 2. Eurasian Whimbrels found in Kodi-Bengre beach of Udupi, Karnataka.

Food

Food of this bird mainly comprises of crabs, snails and other marine invertebrates. With long pointing bill, they can probe into sand muds to pick up the food. The curve of the bill nicely matches with shape of fiddler crab burrows. After extracting the crab from the mud, they rinse it in water and then consume directly. They may remove the largest claw of the crab before consuming if necessary. Depending on the availability, they may eat berries like cranberry, blueberry and insects like flies, beetles, grasshoppers and others.

Habitat and Distribution

During winter, they are found in the coastlines of Karnataka. They can be found in sea shores of Udupi and Mangalore Districts. They prefer tidal mud flats, salt marshes, lagoons, estuaries and even the rocky shorelines. They roost on the mangrove trees when resting or not feeding. They are also winter visitors in other States like Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra, Gujarat, Lakshadweep and Andaman/Nicobar islands. They have been recorded in Maldives and Sri Lanka too. During breeding season, they are found in Thundra regions of North America, Canada and Europe.

Distribution map of the this species based on actual sightings made during 2015 to 2020 developed by the Department of Ornithology, Cornell University through ebird network is shown in Fig.3. It is evident that these birds migrate from Western countries to India during winter. Generally, they visit India in the month of November and return by March every year with location variations. The number of birds visiting a particular location may depend on the availability of the food and local climatic conditions.

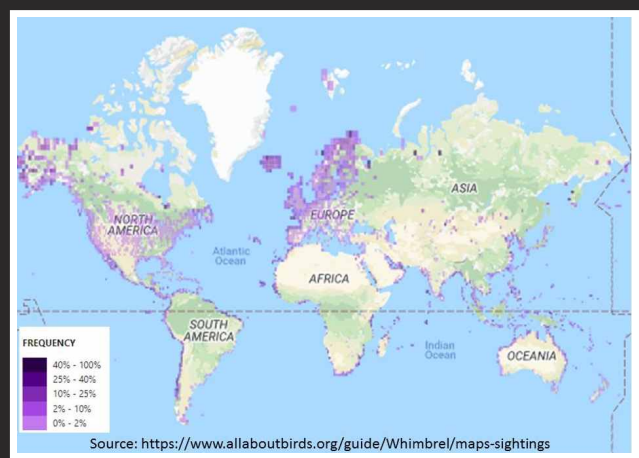


Fig. 3. Frequency distribution map of Whimbrel during 2015 to 2020 from ebird-portal.

Reproduction and Nesting

The major breeding season is between May and July. During breeding season, the males make dramatic aerial flights with song. This is to impress the female and also warning to competitive males. They maintain monogamy during the nesting season. Interestingly, they may prefer same nesting areas and same partner in successive seasons.

Nesting is performed on the ground lined with leaves, grasses and lichens. The nest could be of the size with the breadth of 15 cm and depth of 4 cm. Female lays 2 to 4 eggs and incubation period is of 22 to 28 days. The eggs are bluish-green to brown. Parental responsibilities are taken care by both.

Migration

The Eurasian Whimbrels are one of the greatest migratory birds in the world. Extensive field studies on migration of this species have been carried out. Researchers at College of William and Mary's, United States and Centre for conservation Biology and The Nature Conservancy made an excellent migration study through satellite recording and radiotelemetry. One of the female birds named '*Winnie*' was fixed with a small satellite tracking device on 23rd May 2008 at the feeding grounds in Delmarva Peninsula (East coast of United States). The bird flight was recorded to breeding grounds at McKenzie River near Alaska-Canada border. The study revealed astonishing facts that the bird flew a distance of 5000 km in 146 hr at an average flight speed of 35 km/hr. This has been a record in migratory flight distance for this bird and also indicative of endurance for long distance travel.

In 2009, a tagged Whimbrel named '*Hope*' was recorded to fly 80,000 km in three years between her breeding grounds of Canada to winter grounds of British Virgin Islands. The migrating Whimbrels have been recorded to make nonstop flight over water up to 4,000 km from the South of Canada to England to South America. Breeding regions of this bird is in North America, Canada and Europe. During the winter, they migrate to south Indian coastal lines up to Australia. Several birders have sighted this bird in coastal regions of Karnataka. It is interesting to study from which part of the world these birds are coming to coastal Karnataka. Efforts are required for such migratory studies.

Population Concern and Threats

They are known to breed in remote seashores of the world. An estimate suggested that global breeding population of 1.8 million and hence the

species is of low conservation concern. These birds are hunted for food in other countries. Major threat for their survival is increasing pollution/contamination in the sea/oceans, destruction of coastal wetlands and other environmental perturbations.

It is a point of esteem that Karnataka provides suitable environmental conditions for such migratory birds from the Western world. It has also been observed that the numbers of such migratory birds over the years are dwindling. It is a common practice for birders to record the number. A glance at ebird sightings gave alarming situation of our coastal areas with respect to such migratory birds. Habitat destruction appears to be major cause apart from global climatic changes. A detailed study of these birds residing places in Karnataka may provide proper reasons for decline in number and also envisage improvement of habitats. It would be fascinating study contributing to biology of such wonderful birds and probably providing environmental concern. Their population study in defined regions of Karnataka coastline may indicate improved, threatened and impoverished state of their suitable habitats.

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