

## Species

### To Cite:

Guragain S, Chaudhary S. First confirmed national record of Red-necked Grebe (*Podiceps grisegena*) in Nepal: Documentation of a rare winter vagrant bird. *Species* 2026; 27: e22s3299  
doi:

### Author Affiliation:

<sup>1</sup>Agriculture and Forestry University, Nepal

### Email & ORCIDs:

Sugam Guragain: sugamguragain95@gmail.com  
0009-0009-5808-5223  
Susmita Chaudhary: susmitachaudhary906@gmail.com  
0009-0009-5286-8809

### \*Corresponding Author:

Sugam Guragain,  
Agriculture and Forestry University, Nepal,  
Email: sugamguragain95@gmail.com  
Orcid: 0009-0009-5808-5223

### Peer-Review History

Received: 18 January 2026  
Reviewed & Revised: 07/February/2026 to 29/July/2026  
Accepted: 07 August 2026  
Published: 25 August 2026

### Peer-Review Model

External peer-review was done through double-blind method.

Species  
pISSN 2319-5746; eISSN 2319-5754



© The Author(s) 2026. Open Access. This article is licensed under a Creative Commons Attribution License 4.0 (CC BY 4.0), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

# First confirmed national record of Red-necked Grebe (*Podiceps grisegena*) in Nepal: Documentation of a rare winter vagrant bird

Sugam Guragain<sup>1\*</sup>, Susmita Chaudhary<sup>1</sup>

## ABSTRACT

The Red-necked Grebe is a winter vagrant water bird to South Asia and is distributed across the Europe, Asia, and North America. It belongs to family Podicipedidae and breeds in marshes and lakes. This is the first confirmed record documentation of the species from Nepal. It was recorded at Bulbule Lake, Surkhet, Nepal on October 15, 2025, with photographic evidence. This record extends the known distribution of the species globally and highlights the importance of wetlands as stopover sites, breeding habitats and roosting places for rare migratory waterbirds. The observation of the Red-necked Grebe highlights Nepal's importance as global biodiversity hotspot along major migratory routes. This also highlights the need for conservation and protection of wetlands, contributing to Nepal's bird diversity.

**Keywords:** wetland, migratory bird, Nepal, first record, grebe, Red-necked Grebe

## 1. INTRODUCTION

Red-necked Grebe (*Podiceps grisegena*) is a medium-sized water bird that has specialized swimming and diving characteristics and belongs to the family Podicipedidae (Stout & Nuechterlein, 2020). The Red-necked Grebe is globally listed as a species of Least Concern according to the 2018 IUCN Red List (BirdLife International, 2018a; Ogilvie & Rose, 2003). The species is globally distributed across Canada, the United States, Russia, China and Japan. During the non-breeding season, this species winters from Japan and Korea through Aleutian Islands to California, the eastern United states to Florida, eastern Europe and some part of west central Asia (Stout & Nuechterlein, 2020). The global population is estimated to be 193,000-287,000 individuals according to Wetlands International (2015). The species usually breeds from April to August and feeds on fish, crustaceans and insects (BirdLife International, 2018b).

During the breeding season, the species has a reddish neck, a dark cap and pale cheeks (BirdLife International, 2018b). The species is solitary and territorial during the breeding season but may form semi-colonial groups when high quality nesting habitats are available (Stout & Nuechterlein, 2020). In South Asia, this species is a rare winter vagrant species that is occasionally recorded.

Before this confirmed record, Nepal had recorded only three grebe species: Little Grebe, Great Crested Grebe and Black-necked Grebe (Birdlife International, 2018b).

After the recent sighting of the Red-necked Grebe, Nepal now holds four species of Grebe. This documentation of the first national record is very important for understanding Grebe distribution, migratory connectivity, migratory routes and the importance of wetlands in potential shifts in the distribution of migratory birds. This study describes the identification and significance of the first confirmed occurrence of *P. grisegena* in Nepal, highlighting the value of Nepal as a global biodiversity hotspot.

## 2. MATERIALS AND METHODS

### 2.1. Study Area

Red-necked Grebe was sighted at Bulbule Lake located in Surkhet district of Nepal. It is a freshwater wetland located at an elevation of 656 m above sea level, with geographical coordinates of 28° 34' 52" N latitude and 81° 37' 11" E longitude (Figure 1). The Lake covers an area of approximately 1.25 hectares and has a shallow depth typical of urban ponds.



**Figure 1.** Satellite Map showing Bulbule Lake

Bulbule Lake is a freshwater wetland with floating vegetation that provides habitat and stopover sites for many waterbirds in Nepal. *Shorea robusta*, *Bombax ceiba*, and *Callistemon* species occur around the lake, while water lettuce and other aquatic plants are found within the wetland. Despite its ecological importance, this lake has been facing anthropogenic disturbance such as motorboat activities and increasing human disturbance. These activities have led to fish mortality, noise pollution and water quality degradation directly affecting the ecological balance and the habitat of waterbirds. This shows the urgent need for action on wetland management and maintaining ecological stability.

### 2.2. Observation and Documentation

On October 15, 2025, we sighted the Red-necked Grebe in the lake at around 11:00 a.m (Figure 2). Grebe was swimming and diving continuously in the middle of the lake as the weather conditions was clear and sunny. It was photographed, and field data were collected along with weather conditions and GPS Coordinates.

Observations at the site indicated that the continuous operation of motorboats has caused physical harm to fish populations and disturbed the overall avian habitat through noise pollution and frequent wave generation. Informal discussions with residents revealed that avian diversity and local bird populations have declined significantly in recent years due to increasing foot traffic and the promotion of motor boating for local tourism. Across Nepal, unmanaged tourism activities, whether operated by community forest

user groups or local governments, have increasingly degraded wetland ecosystems and negatively affected aquatic and avian biodiversity.



**Figure 2.** Red-necked Grebe diving and swimming at Bulbule lake

### 2.3. Identification

The Red-necked Grebe was identified based on photographs, videos and field observations. Morphological features observed were:

- Dark to blackish crown
- Pale to whitish cheeks
- Dusky grayish neck
- Clean white underparts
- Long and straight bill, having a yellowish base and dark tip

Based on the above morphological characteristics and evidence, the bird was identified as a Red-necked Grebe in non-breeding (transitional) plumage.

## 3. RESULTS

### 3.1. Nomenclature

Order: Podicipediformes

Family: Podicipedidae

Genus: Podiceps

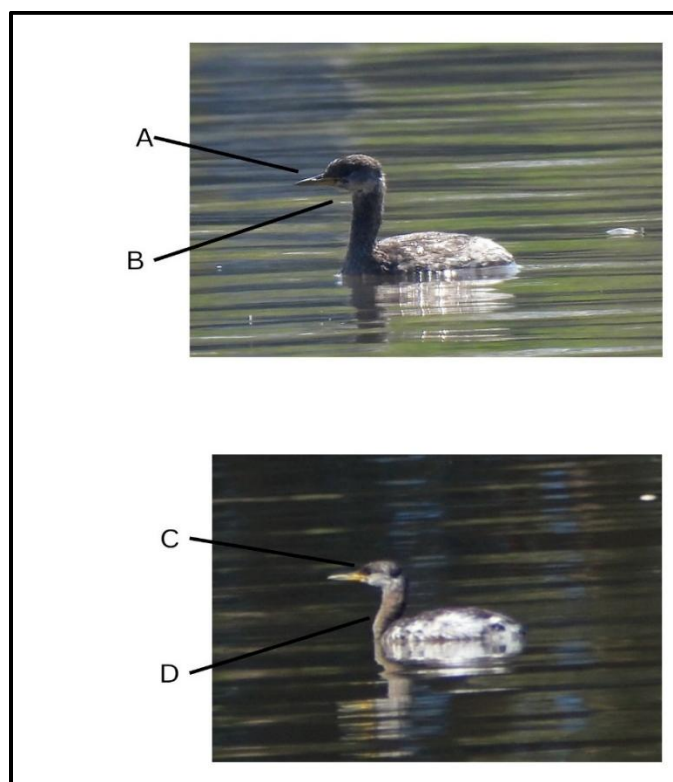
Species: Podiceps grisegena

### 3.2. Material Examined

Photographic and Video documentation with no physical specimen collected.

### 3.3. Diagnostic Characteristics

Features a distinctive Dark to blackish crown as in Figure (3C). Noticeable Pale to whitish cheeks as seen in Figure (3). Dusky grayish neck and clean white underparts (Figure 3 D and B). Long and straight bill, having a yellowish base and dark tip as seen in Figure (3A).



**Figure 3.** A) Part showing Long and straight bill, having a yellowish base and dark tip B) Clean white underparts near beak C) Portion showing Dark to blackish crown D) Dusky grayish neck

### 3.4. Distribution

The species is globally distributed across Canada, the United States, Russia, China and Japan. During the non-breeding season, this species winters from Japan and Korea through Aleutian Islands to California, the eastern United states to Florida, eastern Europe and some part of west central Asia (Stout & Nuechterlein, 2020). The present study reports this bird first time occurrence in Nepal.

## 4. DISCUSSION

The observation of the Red-necked Grebe in Surkhet represents the first confirmed national record of the species in Nepal. This record extends the known distribution range of the species. Nepal is situated along major migratory pathways, including the Central Asian Flyway and the East Asian–Australasian Flyway (EAAF), supporting diverse migratory bird species and making Nepal one of the world's important biodiversity hotspots. These flyways enable Nepal to record rare birds during migration and highlight the importance of Nepal's wetlands as major stopover, wintering and breeding sites.

The occurrence of the species in Nepal may be due to navigational deviation during migration, changes in weather pattern, wetland degradation within its distribution range, shift in distribution pattern due to climate change or separation from the flock during migration. Nepal's suitable wetlands are likely to attract migratory birds by providing favorable stopover sites and breeding habitats. Therefore, continuous monitoring and conservation of wetlands are essential to determine the actual reason for the occurrence of this species in Nepal.

## 5. CONCLUSION

The confirmed record of Red-necked Grebe adds significant value to the avifaunal diversity of Nepal and increases the total number of Grebe species recorded in the country to four. This finding highlights the need for regular monitoring and study of Nepal's wetlands to improve our understanding of migratory patterns and the occurrences of vagrant species. It also suggests the need for the conservation and protection of wetlands of Nepal to maintain ecological balance for both resident and migratory species. This finding broadens the documented distribution of the species and represents its first confirmed occurrence in Nepal.

### Acknowledgement

We are very thankful to Bird Conservation Nepal for their help with species identification. We are also thankful to Mr. Prasan Shrestha for his guidance throughout the species identification process.

### Author contributions

Sugam Guragain: Conceptualization (equal); Data curation (equal); Formal analysis (equal); Investigation (equal); Methodology (equal); Validation (equal); (equal); Writing – original draft (equal)

Susmita Chaudhary: Conceptualization (equal); Data curation (equal); Formal analysis (equal); Investigation (equal); Methodology (equal); Validation (equal); (equal); Writing – original draft (equal)

### Funding

This research did not receive any external funding like a specific grant from funding agencies in the public, commercial, or nonprofit sectors.

### Conflict of Interest

The authors declare that they have no conflicts of interest, competing financial interest or personal relationship that could have influenced the work reported in this paper.

### Informed consent

Not applicable.

### Ethical approval & declaration

This study involved field observation and photographic documentation of a wild bird without capture, handling, or disturbance. All observations were conducted following ethical guidelines for wildlife research. No institutional ethical approval was required.

### Data and materials availability

All data associated with this study are present in the paper.

## REFERENCES

1. BirdLife International. *Podiceps grisegena*. The IUCN Red List of Threatened Species 2018a; e.T22696599A132582688. doi: <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22696599A132582688.en>.
2. BirdLife International. Species factsheet: Red-necked Grebe (*Podiceps grisegena*). BirdLife International Data Zone 2018b. Url: <https://datazone.birdlife.org/species/factsheet/red-necked-grebe-podiceps-grisegena>.
3. Ogilvie MA, Rose C. Grebes of the World. Uxbridge, UK: Bruce Coleman Books; 2003.
4. Stout BE, Nuechterlein GL. Red-necked Grebe (*Podiceps grisegena*), version 1.0. In: Billerman SM, editor. Birds of the World. Cornell Lab of Ornithology; 2020. doi: 10.2173/bow.rengre.01.
5. Wetlands International. Waterbird Population Estimates. 2015.