

# RE-DISCOVERY OF SMALL SILVERFORK, *LETHE JALAUURIDA* (INSECTA: LEPIDOPTERA: NYMPHALIDAE) FROM GARHWAL, UTTARAKHAND, INDIA

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## Abstract

This short note reports the rediscovery of Small Silverfork, *Lethe jalaurida* (de Nicéville, 1881) from Gopeshwar, Chamoli District, Uttarakhand, India after a gap of 120 years.

## Introduction

The butterfly identification and collection in Uttarakhand (erstwhile United Provinces) started during the pre-Independence period. A list of 271 butterfly species was published by Doherty (1886) from Kumaon. Mackinnon & de Nicéville (1899) studied butterflies in Mussoorie and adjacent areas and published a list of 323 species. The Mussoorie area was further explored by Ollenbach (1929). For the past few decades, Smetacek (2001, 2002, 2011), Singh (2005a, 2005b) published papers on the butterflies of Uttarakhand. Many independent butterfly enthusiasts and researchers have contributed significantly to the rediscoveries, range extensions and observations of butterflies of Uttarakhand (Kumar *et al.*, 2018, 2019, 2020; Venkatesh, 2016; Joshi, 2020). Our team has been studying and documenting butterflies in Uttarakhand for the past few years. At regular intervals, we surveyed Chamoli, Gopeshwar, Chopta and Rudranath areas.

The present short note presents the rediscovery of Small Silverfork, *Lethe jalaurida* (de Nicéville, 1881) from Gopeshwar, Chamoli District, Garhwal Zone, Uttarakhand, India. It was last recorded from Garhwal (Sangla valley, Har-ki-noon area, Govind Pashu Vihar) by Mackinnon & de Nicéville in 1899 and now rediscovered after 120 years

from Garhwal. It is listed in Schedule II of the Indian Wild Life (Protection) Act, 1972.

## Materials and Methods

### Study Area

The Gopeshwar to Rudranath trek is a beautiful path with very few villages and rich biodiversity. The number of pilgrims visiting the sacred shrine of Rudranath is small. The study area (Fig. 2) contains mostly evergreen forest dominated by oak (*Quercus* sp.) and deodar (*Cedrus deodara*) species associated with bamboo (*Arundinaria* sp.), birch (*Betula utilis*), rhododendron (*Rhododendron arboreum*) and scattered yew (*Taxus baccata*).

### Methodology

The Gopeshwar-Rudranath trek was surveyed between 20.viii.2020 to 23.viii.2020 and it was visited again from 25.ix.2020 to 27.ix.2020. While surveying and documenting butterflies of this area, Small Silverfork, *Lethe jalaurida* (de Nicéville, 1881) was photographed with a digital single-lens reflex camera. It was photographed from many angles to confirm the identity. The identification of the butterfly was confirmed as Small Silverfork, *L. jalaurida* with the help of Evans (1932), Wynter-Blyth (1957) and Sondhi & Kunte (2018).

**Observations**

*L. jalaurida* (Fig. 1) is a montane species found between 2100 m to 3300 m during June to September. The type locality is the Jalauri Pass in Himachal Pradesh. According to Varshney & Smetacek (2015), the nominate subspecies is distributed from Himachal Pradesh to Uttarakhand.

This species was observed at Moli-kharak (30°27'58" N; 79°20'23" E), 13 km from Gopeshwar, Chamoli District of Garhwal in the shrubby area near the opening of forest, alongside the path. This sighting was made at 12:45 hrs (IST) on September 21, 2020. Only a single individual was recorded throughout the whole survey. The sky was partly cloudy. The butterfly was moving actively and soon flew away.

It is noteworthy that it was not recorded by Singh & Sondhi (2016) during a detailed survey of Garhwal.

**Discussion and Conclusion**

Unlike other members of the genus, which are local and locally common at suitable seasons, this butterfly was only observed once and did not stay in the area. This seems to be the main reason why it has not been recorded in the recent past. However, the present record confirms that the butterfly is still present in the western Himalaya. The type material was recorded in July 1897 and the present record from September suggests that there are two generations a year. It was not recorded in August in the present study, although this does not mean that they are not actually on the wing in that month, merely that they were not recorded.

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**References**

- Doherty, W. 1886. A list of butterflies taken in Kumaon. *Journal of the Asiatic Society of Bengal* 55(2):103-140.
- Evans, W.H. 1932. *The Identification of Indian Butterflies*. Bombay Natural History Society, Bombay. x+454 pp., 32 pl.
- Joshi, G. 2020. Re-discovery of the Assam Flash butterfly *Rapala tara* (Lepidoptera: Lycaenidae) from Uttarakhand, India. *Bionotes* 22(3): 135.
- Kumar, S., P. Singh & K. Joshi. 2018. Range extension of *Matapa sasivarna* [Moore (1884)] Black-veined Branded Redeye to western Himalaya. *Indian Forester* 144(10): 1010-1012.
- Kumar, S., R.S. Singh & P. Singh. 2019. Re-discovery of the Narrow Spark butterfly *Sinthusia nasaka pallidior* Fruhstorfer, 1912 (Lepidoptera: Lycaenidae: Theclinae) from Uttarakhand, India. *Bionotes* 21(1):10-11.
- Kumar, S., R.S. Singh, P. Singh, S. Kumar. 2020. Range extension of Purple swift *Caltores tulsii* de Nicéville (Lepidoptera: Hesperiiidae) to the western Himalaya. *Bionotes* 22(3): 121-124.
- Mackinnon, P.W. & L. de Nicéville. 1899. List of butterflies of Mussoorie in the Western Himalayas and neighbouring region. *Journal of the Bombay Natural History Society* 11: 205-221, 368-389, 585-605.
- Ollenbach, O.C. 1930. Butterfly collecting grounds at Mussoorie (U.P.). *Journal of the Bombay Natural History Society* 34(3): 836-840.
- Smetacek, P. 2001. Resolution of the controversial western limit of the range of *Delias acalis* Godart (Lepidoptera: Pieridae). *Journal of the Bombay Natural History Society* 98: 298-300.
- Smetacek, P. 2002. The genus *Pontia* Fabricius (Lepidoptera: Pieridae) in the Kumaon Himalaya. *Journal of the Bombay Natural History Society* 99: 224-231.

Smetacek, P. 2011. Four new lycaenid butterfly records from the Kumaon Himalaya, India. *Journal of Threatened Taxa* 3(2): 1555-1558.

Singh, A.P. 2005a. Initial colonization of Red Pierrot butterfly *Talicauda nyseus nyseus* Guerin (Lycaenidae) in the lower western Himalayas: an indicator of the changing environment. *Current Science* 89: 41-42.

Singh, A.P. 2005b. Recent records on the distribution, seasonality and occurrence of Redspot butterfly *Zesius chrysomallus* Hübner from the lower western Himalayas. *Journal of the Bombay Natural History Society* 102(2): 238-239.

Singh, A.P. & S. Sondhi. 2016. Butterflies of Garhwal, Uttarakhand, western Himalaya, India. *Journal of Threatened Taxa* 8(4): 8666-8697.

Sondhi, S. & K. Kunte. 2018. *Butterflies of Uttarakhand A Field Guide*. Bishen Singh Mahendra Pal Singh, Dehradun, National Centre for Biological Sciences, Bengaluru and Indian Foundation of Butterflies, Bengaluru. x + 310.

Venkatesh, V. 2016. Reporting the occurrence of the Variegated Plushblue *Flos adriana* (Lepidoptera: Lycaenidae: Theclinae) from Garhwal, Uttarakhand extending its known range. *Journal of Threatened Taxa* 8(5): 8829-8830.

Varshney, R.K. & P. Smetacek (eds.). 2015. *A Synoptic Catalogue of the Butterflies of India*. Butterfly Research Centre, Bhimtal & Indinov Publishing, New Delhi, ii + 261 pp., 8 pls.

Wynter-Blyth, M.A. 1957. *Butterflies of the Indian Region*. Bombay Natural History Society, Bombay. xx+ 523 pp., 72 pl.



Fig.1: *Lethe jalaaurida* at Gopeshwar, Chamoli, Uttarakhand



Fig.2: A glimpse of habitat of *Lethe jalaaurida*