NOTES ON EPHEMEROPTERA.

By D. E. Kimmins.

**Baetis longicauda** of Stephens.

Whilst studying the British species of Ephemeroptera, I have noticed that the name *Baetis longicauda* Stephens has, of recent years, been mis-applied. Stephens (1836) described the species as follows:


"Pale luteous-ochre: eyes fuscous; thorax glossy; abdomen pale ochreous at the base, the apex darker, the segments edged with fuscous; filaments considerably above twice the length of the insect, pale ochreous, with faint fuscous spots; legs pale ochreous, tips of femora fuscous; wings transparent, with the costa and nervures yellowish.

"Taken near Hertford, towards the middle of June."

Pictet (1844) cites it with three other species in an appendix to the genus *Baetis*, observing that they closely resembled his *Baetis cerea* and *Baetis sulphurea* Müller (both now placed in the genus *Heptagenia*). In 1871 Eaton transferred *longicauda* to the genus *Heptagenia*, and quoted *Baetis subfusca* Stephens 1836 as a synonym. Later he decided that his 1871 identification of *Baetis longicauda* Stephens was incorrect, and in his Revisional Monograph (p. 273) placed *longicauda* Stephens 1836 in the synonymy of *Heptagenia flavipennis* Dufour, 1841, quoting *longicauda* Stephens, which has priority, as a nomen ineptum, and (p. 284) cited *Heptagenia longicauda* Eaton 1871 (together with *Baetis subfusca* Stephens) as synonyms of *Ecdyurus venosus* (Fabricius). In 1888 (Ent. Mon. Mag., 25 : 32) he definitely quotes "*H. longicauda* (not of Steph.)" with a reference to the 1871 monograph, in the synonymy of *E. venosus* (Fabr.), and *Baetis longicauda* Stephens is again placed as a synonym of *Heptagenia flavipennis* Dufour.

Stephens' description agrees better with *Heptagenia flavipennis* than with *Ecdyurus longicauda* Eaton, nec Stephens, which latter could scarcely be described as "pale luteous-ochre." The abdomen of *longicauda* Eaton is reddish brown at the base and the legs are fuscous or yellowish brown.

Eaton's action in rejecting on the grounds of inappropriateness the name *Baetis longicauda* Stephens, 1836, in favour of *Ephemera flavipennis* Dufour, 1841, is unjustifiable, and were such a practice...
to be followed, it would open the way for innumerable changes of nomenclature, and cause far more confusion than the present change will entail. His action is, moreover, contrary to Article 32 of the International Rules.

*Heptagenia flavipennis* (Dufour, 1841) must therefore give place to *Heptagenia longicauda* (Stephens, 1836), with synonymy as follows:

*Heptagenia longicauda* (Stephens, 1836).


The species *Ecdyonurus longicauda* (Eaton, 1871), referred to by Blair and others as *Ecdyonurus longicauda* Stephens, must also of necessity suffer a change of name. This species proves to be identical with *Ecdyonurus dispar* (Curtis, 1834), a name which has been long in the synonymy of *E. venosus* (Fabricius). My attention was first called to this species by Dr. Blair, who had collected some examples of *Ecdyonurus* from Windermere in June, 1929. These were not *E. venosus* and he suspected that they might be *dispar* of Curtis, the type locality for which is Ambleside. Curtis’s types of this species are in the National Museum, Melbourne, and examples of Dr. Blair’s series were compared with the type ♂ by Mr. J. Clark and found to be identical. In 1941 I was able to collect further material of this species from the shores of Windermere, and I am convinced that *dispar* and *longicauda* Eaton *nec* Stephens are only summer and autumn forms of the same species. On Windermere, *dispar* occurs from June to October, with a main hatch in June and a secondary one in September. The June flies are decidedly larger than those in the autumn. *E. longicauda* Eaton *nec* Stephens appears to have its main hatch in the autumn, but I have seen large specimens taken in June which are indistinguishable from the June *dispar*. I can detect no significant difference in the male genitalia and the wing pattern of the subimagines is the same.

*Ecdyonurus dispar* (Curtis, 1834).

1834. *Baetis dispar* Curtis, Lond. and Edinb. Phil. Mag., ser. 3 : 120.
Ecdyonurus helveticus (Eaton).

In 1871 Eaton described the species Heptagenia alpocola, his type-series consisting of examples from Savoy, Les Contamines and Carinthia. In his Revisional Monograph (1885, p. 239) he restricted this species to the Savoy specimens, transferring them to the genus Epeorus. The Carinthian specimens were referred to in the bibliography of Epeorus alpocola thus: "(excl. Carinthian examples and pl. vi, 19, detail of Ecdyurus zelleri)." In the succeeding part of the same publication (1887, p. 286) Eaton again refers to these Carinthian examples, placing E. zelleri in the synonymy of Ecdyurus forcipula (Pictet).

In his description of E. forcipula (Pictet) he says of the male fore-leg, "1st tarsal joint of normal length," i.e. about half as long as the second. The Carinthian specimens in the McLachlan Collection, however, have the first tarsal segment distinctly less than half the length of the second. Specimens determined as forcipula in this collection from Val Anzasca and a large proportion of those from the Apennino Pistoiese also possess this very short first tarsal segment, which is a distinguishing character of Eaton's Ecdyurus helveticus. The male genitalia of these short-segmented examples were compared with those of helveticus, and were found to be very much alike, but different from those figured as E. forcipula by Ulmer (1929) and Schoenemund (1930).

The differences between the Carinthian and the Swiss forms are tabulated below:

**Carinthia.**

♂. Anterior leg pale brownish.
Anterior wing hyaline, colourless, costal cross-veins, especially at base, weak and often pale.
Pterostigma slightly fumose.

Forceps-base with a tooth on each side, often acute and somewhat incurved, margin between the teeth convex but not generally triangularly produced.

Apical sclerites of penis larger and rounded at apex; stem of penis generally longer than broad.
Setae brownish, usually without annulations.

**Switzerland.**

Pale piceous.
Hyaline, slightly brownish-fumose, costal cross-veins distinct.
Generally distinctly suffused with piceous.
With a tooth on each side, variable in size, but generally rounded at its apex and rarely incurved; surface of forceps-base between the teeth generally triangularly produced, often extending beyond the margin.
Apical sclerites generally narrower; stem of penis usually about as long as broad.
Setae brownish at base, becoming paler apically, usually with distinct fuscous annulations.
It will be seen that the differences are not very great and they tend to grade one into another. This is especially noticeable in examples from the Apennines, of which it is difficult to decide to which division any particular individual belongs. On the basis of my present material, and being without knowledge of the habits of either form, I am inclined to consider them all to belong to one species.

In deciding the name of this species, one must also take into consideration *Edyurus italicus* Eaton. This name first appeared on Plate XXIV, fig. 46c (1883) of the Revisional Monograph. The figure depicts a ventral view of the penis lobes of a freshly killed specimen. Eaton later considered *italicus* to be conspecific with *zelleri* and in 1887 placed both in the synonymy of *E. forcipula* (Pictet). This figure would pass easily as either *zelleri* or *helveticus*, and as the majority of Eaton’s examples of “forcipula” are of this pattern, with the short first tarsal segment, it may be assumed that he was correct in considering *italicus* to be conspecific with *zelleri*.

The name *E. helveticus* also appears for the first time on the same plate, fig. 46a, a figure of the male fore tarsus, and is thus of the same date as *italicus*. As *helveticus* bears an earlier letter (equivalent to page precedence) and the name has been in general use for many years, I am selecting the name *helveticus* in preference to *italicus*. There appears to have been no previous fixation of types of these species, and I have therefore selected the following specimens:

![Figure 1](image_url)
Ecyonurus helveticus (Eaton, 1883).


Ecyonurus italicus (Eaton, 1883).


Ecyonurus zelleri (Eaton, 1885).


The synonymy of E. helveticus may be quoted as follows:

Ecyonurus helveticus (Eaton, 1883).

1885. Ecyonurus zelleri Eaton, op. cit., 239.

Wray Castle,
Ambleside,
Westmorland.

First appearances, 1942.—After the prolonged winter weather of 1941–42, the hibernated butterflies did not appear on the wing until much later than is usual. The first Gonepteryx rhamni Mr. Pounds noted at Dorking, Surrey, was on March 14, whilst on March 25 Polygonia c-album and Aglaia urticae were seen. In Sevenoaks G. rhamni, A. urticae and Nymphalis io were flying on March 25.—William E. Busbridge; "Gresham," Bradbourne Park Road, Sevenoaks.
Dieser Artikel ist print-optimiert.
Stellen Sie als Ausgabegröße DIN A5 oder 148 x 210 mm ein.

This article is print-optimized!
Output print format should be German DIN A5 or 148 x 210 mm.
Dieser Artikel ist print-optimiert. Stellen Sie als Ausgabegröße DIN A5 oder 148 x 210 mm ein.

This article is print-optimized! Output print format should be German DIN A5 or 148 x 210 mm.