

**Case 3493*****Haliplanella* Hand, 1956 (Anthozoa, Actiniaria): proposed conservation by suppression of *Haliplanella* Treadwell, 1943 (Polychaeta)**

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**Abstract.** The purpose of this application, under Article 23.9.3 of the Code, is to conserve the generic name *Haliplanella* Hand, 1956 for a widespread sea anemone by suppressing the senior name *Haliplanella* Treadwell, 1943 that was first, through an error, used for a group of polychaete annelids, was later put into synonymy, and is now no longer used.

**Keywords.** Nomenclature; taxonomy; Cnidaria; Anthozoa; Actiniaria; Annelida; *Haliplanella*; *Haliplanella lineata*; sea anemones; worldwide.

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1. Homonymy exists between the genus-group names *Haliplanella* Treadwell, 1943 (Polychaeta) and *Haliplanella* Hand, 1956 (Anthozoa). The senior name has generally been omitted from lists of generic names and has long been relegated to synonymy, whereas the junior name has enjoyed currency and forms the basis of a family-group name. In our opinion stability would best be served by suppressing the senior homonym.

2. This situation was first brought to the attention of the International Commission on Zoological Nomenclature in 1977 as Case 2192 by Dunn & Hand (1977) but was never voted on. Comments on the case by den Hartog (1978) and Williams (1978) were published in the Bulletin of Zoological Nomenclature and responded to by Dunn & Hand (1978). In recent correspondence with the Secretary of the Commission it was established that Fautin (who had written under the name Dunn in the 1977 appeal) had agreed to hold back this application pending publication of 'den Hartog's new taxonomic evidence'. However this evidence was never published and den Hartog died in 2000. It seems that taxonomic concerns (discussed below) prompted the Commission to delay the voting on this Case, but the nomenclatural issue remains and should be resolved. Considering the length of time elapsed and the

many developments since the original appeal, the Secretary advised that a new application be formulated rather than resuscitating Case 2192.

3. The genus-group name *Haliplanella* was first published by Treadwell (1943), p. 32 for a pelagic marine polychaete. He provided a short summary of the differences between the genera *Haliplanes* and *Haliplanella*, attributing both genera and the differential diagnosis to Reibisch (1895). The use of the name *Haliplanella* was clearly an error because it does not appear in any of Reibisch's published work, although the pages cited by Treadwell do contain descriptions of the genus *Haliplanes* and of the species *Haliplanes gracilis*. In the same paper, Treadwell (1943, p. 32) described a new species, *Haliplanella pacifica* (holotype 20079, United States National Museum), whereby the name *Haliplanella* Treadwell, 1943 met the criteria of availability, with *H. pacifica* the type species by monotypy. Although Treadwell has been recognised as author of the genus (Dales, 1957; Hartman, 1956, 1959; Ushakov, 1972), *Haliplanella* did not appear in Volume 5 of *Nomenclator Zoologicus* (Neave, 1950), probably because it had not been intended as a new name by Treadwell (1943).

4. The sea anemone in question, variously known as *Haliplanella luciae*, *H. lineata*, *Diadumene luciae* or *D. lineata*, is the most widespread species of anemone in the world (e.g. Seaton, 1985; Fautin et al., in press), having apparently been dispersed in part through human agency (Zabin et al., 2004). Its distribution is probably attributable to its ability to tolerate extremes of salinity and temperature better than most anemones, and its ability to reproduce asexually (e.g. Minasian, 1982). Because of these broad tolerances, and the associated ease of keeping animals in the laboratory, it has been the subject of much physiological and ecological research (e.g. Williams, 1968, 1972, 1973, 1975; Sassaman & Mangum, 1970, 1973; Kiener, 1971; Atoda, 1973, 1976; Shick, 1976; Mire & Venable, 1999; Watson et al., 2008). Unlike many anemones, it is so morphologically distinctive as to be almost unmistakable, and so the taxonomic issue alluded to above does not relate to the problem of identifying an invasive species. In 1869, Verrill (p. 23) described *Sagartia lineata* based on preserved specimens from Hong Kong that were accompanied by notes on colour, habitat, etc. in life. In 1898, Verrill (p. 393) described *Sagartia luciae* based on live specimens from Woods Hole, Massachusetts, that were discovered by his daughter, Lucy. No type material of either species exists (Fautin, 2008). It is now widely accepted (e.g. Seaton, 1985) that both of Verrill's descriptions refer to a single species. In Verrill's day this might have seemed unlikely, but in the light of what we now know about the distribution and tolerances of the species, it is a reasonable conclusion. In 1956 (pp. 210–211), Hand proposed the genus *Haliplanella* for the sea anemone described as *Sagartia luciae* Verrill, 1898 (pp. 493–494). The species has also been included in other genera (see synonymies in Hand, 1956; Fautin, 2008). At the same time Hand (1956, p. 210) established the monotypical family HALIPLANELLIDAE for *Haliplanella luciae* (Verrill, 1898). Neave (1939) listed 'Haliplanes (pro Haly-Reibisch, 1893) Reibisch, 1894, Pelag. Phyllodoc., 3, 12.—Verm (Polych.)' and the online version notes it is a junior homonym. The subsequent volume of *Nomenclator Zoologicus* (Edwards & Hopwood, 1966, p. 115) listed '*Haliplanella* Hand 1955, *Wasmann J. Biol.* Vol. 13: 210.—Coel.'

5. The first comment by Williams (1978) on the proposal by Dunn & Hand (1977) to suppress the name *Haliplanella* for the polychaete in favour of that for the sea

anemone concerned the date of Hand's description; Dunn & Hand (1978) conceded that the issue of the journal was dated 1955 but appeared in 1956, as documented by a note in the subsequent volume of the journal. The second comment by Williams (1978) as well as those by den Hartog (1978) were taxonomic in nature. den Hartog (1978, p. 74) thought it likely that *Haliplanella* and HALIPLANELLIDAE would 'disappear in synonymy', so the appeal by Dunn & Hand (1977) was moot. Although late in his life Hand eventually came to share that opinion, the name *Diadumene* Stephenson, 1920 (type species by monotypy *Tricnidactis errans* de Oliveira Pires, 1987) has been placed in the family *Haliplanellidae*, which would be invalid under Article 39 unless this application, first made in Case 2192, is granted.

6. Hartman (1956) synonymised *Haliplanella pacifica* Treadwell, 1943 under *Halyplanes gracilis* Reibisch, 1893, the type species of *Halyplanes*. In 1957, Dales synonymised the genus *Halyplanes* under the genus *Maupasia* Viguier, 1886. Thus *Haliplanella pacifica* Treadwell is now considered a junior subjective synonym of *Maupasia gracilis* (Reibisch) (Hartman, 1959; Ushakov, 1972).

7. From 1955 through the latest issue available online, the generic name *Haliplanella* appeared in *Biological Abstracts* once for the polychaete, as an invalid synonym (Hartman, 1956), and 55 times for the anemone, often as a valid name (aside from citations in paragraphs 4 and 5, above, e.g. Minasian & Mariscal, 1979; Watson & Mire, 2004) and also as a synonym (e.g. Molina et al., 2009). Thus, during the past 54 years, the name *Haliplanella* has appeared in the literature for the polychaete only once, as a junior synonym of *Maupasia* Viguier, 1886, while *Haliplanella* is still used for the anemone. Under these circumstances, although the conditions of Article 23.9.1 for automatic maintenance of prevailing usage are not met, we believe that conservation of *Haliplanella* Hand, 1956 will best serve stability of nomenclature and thus refer the matter for a ruling as specified in Article 23.9.3.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Haliplanella* Treadwell, 1943 and all uses of the name for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Haliplanella* Hand, 1956 (gender: feminine), type-species by monotypy *Sagartia luciae* Verrill, 1898 (Anthozoa);
- (3) to place on the Official List of Specific Names in Zoology the name *lineata* Verrill, 1869, as published in the binomen *Sagartia lineata* (senior subjective synonym of the type-species of *Haliplanella* Hand, 1956);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the generic name *Haliplanella* Treadwell, 1943 (Polychaeta), as suppressed in (1) above.

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