

A taxonomic revision of the Giant Long-necked Terrapin, *Chelodina expansa* Gray, 1857 species complex and related matters of taxonomy and nomenclature.

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ABSTRACT

Within Australian herpetological circles, the freshwater terrapins assigned to the species *Chelodina expansa* Gray, 1857 have for decades been regarded as comprising more than one species.

Morphological and molecular studies have largely resolved the issues regarding consistent differences between populations, as well as species boundaries in terms of geographical barriers.

The nominate form occurs in the Murray/Darling River system. Two other forms, one sufficiently divergent to be treated as a separate species, the other as a subspecies of *C. expansa* are found in South-east Queensland.

None of the regional forms have been taxonomically recognized to date.

Noting that the unnamed species and the unnamed subspecies both occur in south-east Queensland, a region of strong human population growth, massive ongoing environmental degradation and anti-wildlife governments, it is important that these two taxa be formally recognized as a first step towards ensuring the long-term protection of the relevant species and subspecies.

This paper formally names each of these taxa and also places the trio (*C. expansa, C. duboisi sp. nov.* and *C. expansa brisbaneensis subsp. nov.*) into a new subgenus *Supremechelys subgen. nov.*

In order to correct persistent nomenclatural errors recklessly created by pseudo-scientist Scott Thomson (formerly of Canberra, Australia), the following actions are made:

1/ Chelodina canni McCord and Thomson, 2002 is formally made synonymous with Chelodina rankini Wells and Wellington, 1985. This is on the basis that the claim by McCord and Thomson, 2002 that the Wells and Wellington name was *nomen nudem* is patently false. The falsity of the claim is demonstrated herein by simple cross-referencing of the text from the 1985 paper of Wells and Wellington with the current edition of the Zoological Code which defines *nomen nudem* and as a result shows this is not the case for the 1985 description.

2/ Likewise *Myuchelys* Thomson and Georges (2009) is an unethically coined name that is a junior synonym of *Wollumbinia* Wells, 2007.

Keywords: Terrapin; Tortoise; Turtle; Queensland; Australia; *Chelodina; Macrochelodina; Macrodiremys; Wollumbinia; Myuchelys; expansa; longicollis;* new subgenus; *Supremechelys*; new species; *duboisi*; new subspecies; *brisbaneensis*; Cann; Wells; Wellington; Kaiser; Wüster; Thomson; Georges; McCord; Dubois; *rankini; canni; nomen nudem*.

INTRODUCTION

The description of living reptiles with shells in layman's language has been fraught with conflict.

Authors have used the terms turtle and tortoise almost interchangeably, with or without justification. The term terrapin has generally been consistently used to describe freshwater species that are mainly aquatic and have webbed feet.

As a matter of precision I prefer to divide all living reptiles (itself not a monophyletic group) within order Testudines, as follows:

Possession of flippers means a turtle.

Possession of webbed feet means a terrapin.

Possession of feet without webbing is a tortoise. For those who do not recognize terrapin as a valid term (noting it has often been applied to one or two species only), the most common variant is to define anything with claws as a tortoise. In light of the above, I therefore prefer to define all the Australian species with webbed feet and claws as terrapins.

The largest long-necked species of terrapin within Australia is

the well-known species from south-east Australia, first scientifically described as *Chelodina expansa* Gray, 1857.

The distribution of the taxon as generally recognized is the Murray/Darling river system, which occupies a huge area including most of the inland areas of Victoria, NSW, and southern Queensland and including a small part of south-east South Australia.

However specimens assigned to this species have been less commonly found in coastal regions of south-east Queensland as well.

As to exactly when herpetologists first became aware that the specimens from coastal Queensland were different to those from inland areas isn't known. However I first became aware of the fact in 1977.

That year (at age 15), I visited Peter Richardson, then owner of the Dreamtime Reptile Park on the edge of Bundaberg township, Queensland, Australia. He gave me the smallest of his three "*Chelodina expansa*" to take back to Sydney, New South Wales, where I kept it for many years.

Earlier that year, another herpetologist local to myself at St. Ives in New South Wales, Robert Croft, had shown me specimens of *C. expansa* he had found crossing roads near Moonee in southwest Queensland (Weir River system).

These animals, assumed to be the typical form of the species differed from the Bundaberg animals in having a broader, lighter coloured shell and different plastron colouration.

At the time I received my Burnett River (Bundaberg) animal from Peter Richardson, he mentioned to me that the coastal Queensland animals (from his area at least) were significantly different from the inland animals and it appeared to be common knowledge at the time.

In 1983 and again in 1985, Wells and Wellington (both of outer Sydney, NSW) published two major papers, the second of greatest significance, in combination describing numerous taxa of Australian freshwater terrapin, at both genus and species level (Wells and Wellington 1983, 1985).

Relying on significant data published by his colleague John Cann (also of Sydney) in his major book published in 1998 (Cann 1998), as well as his own extensive experience with relevant taxa, Wells (2007, 2009) named further terrapin taxa in the following decade.

Cann and others also described other Australian species in the twenty years to year 2014, meaning that most obvious species of Australian freshwater terrapin had in fact been properly named and assigned at both genus, subgenus and species level.

Throwing a spanner in the works was a renegade taxonomist Scott Thomson, perhaps better described as a pseudo-scientist who repeatedly sought to rename species and genera first named by Richard Wells and Ross Wellington.

This was in direct breach of the rules of the Zoological Code and in total contempt for the authority of the ICZN (Wells 2014a).

Thomson first sought to rename *Chelodina rankini* Wells and Wellington, 1985 with his own coined name in a paper he coauthored with Bill McCord in 2002. Then with friend Arthur Georges, (Thomson and Georges 2009) he recklessly renamed a number of Wells taxa, including the genus *Wollumbinia* Wells, 2007 by falsely alleging Wells' descriptions had not been published according to Article 8 of the Zoological Code (Ride *et al.* 1999), using a dishonest method later described by Eipper (2014) as the Kaiser veto.

The false claims against Wells and Wellington (1985) and Wells (2007) were repeated by Georges and Thomson (2010).

The nomenclature of Thomson and Georges and McCord and Thomson has been actively promoted by these men and others in the so-called Wüster gang (e.g. Kaiser 2012a, 2012b, 2013, 2014a, 2014b; Kaiser *et al.* 2013; Naish 2013), also identifying themselves as the "truth haters", resulting in a destabilizing dual nomenclature for many species.

When McCord sought to distance himself from Thomson's unethical activities in the period preceding year 2012, McCord's works and names of taxa first proposed by him were added to the Wüster gang's hit list of names to be overwritten by the group (Kaiser 2012a, 2012b).

McCord took legal action against Kaiser personally in late 2012, the result being that the Wüster gang agreed to drop their attempts to overwrite his names and taxa.

Hence without explanation for their reversal, the Wüster gang deleted from the Kaiser *et al.* hit list as published in 2013 (Kaiser *et al.* 2013) all references to McCord and his names they had sought to over-write.

This effectively meant that as of mid 2014, the only known way to stop the unethical actions of the Wüster gang is via money and lawyers and not through any sensible scientific discourse.

Cogger (2014), sticking to the Zoological Code (Ride *et al.* 2014), condemned the reckless destabilizing actions of Scott Thomson and the rest of the Wüster gang, correctly using the Wells names (e.g. *Wollumbinia*).

However Cogger clearly made one nomenclatural error in his book by failing to check a claim made by McCord and Thomson (2002) with the primary literature, this being Wells and Wellington (1985) and Ride *et al.* (1999) (see below).

Weinington (1505) and Nucle et al. (1505) (see below). While both Thomson and Georges have done some valuable work on Australian freshwater terrapins in the period to 2009, all that work has been greatly overshadowed by their reckless misuse of and breach of the nomenclatural rules within the Zoological Code to try to steal the earlier work of Richard Wells. I have worked with all known species of Australian testudines at one time or other and keep a number of them at my facility as of 2014. I first kept various species of Australian testudines more than 40 years prior and had hands on experience with them continuously ever since, as shown for example in Hoser (1989). Notwithstanding this, my taxonomic interests have usually been elsewhere and I am only formally describing the species and subspecies within this paper simply because no one else has.

When I checked with all the people I thought likely to be interested in naming the relevant taxa, none said they intended doing so in the near future and all advised me to do so. Noting the conservation aspects in terms of the relevant species I have also made a judgement call to name these species sooner rather than later. Hence this paper!

I should also mention that most of my data and relevant material on the *Chelodina expansa* species complex was stolen from my facility in three unlawful raids by Australian police and wildlife officers, the first being on 8 May 1981 (see Hoser 1993 and 1996), the second on 14 February 1994 (see Hoser 1994, 1996, 1999a, 1999b) and the third on 17 August 2011.

Each were a direct result of myself disclosing corruption involving government officials here in Australia and their reprisals for this, the most recent raid being planned in response to the publication of Hoser (2010) and unlawful agitation by the Wüster gang and business rivals (e.g. Hunter *et al.* 2006). The extreme damage to the science and conservation of Australian wildlife as a result of these actions has been immense and any deficiencies in papers postdating these raids is a direct result of this.

I note also that I have taken the preferable route of publishing in the face of these obstacles, rather than putting species at risk by doing nothing.

Cann (1998) in his definitive book on Australian testudines not only provided detailed information about the holotype specimen of *C. expansa*, clearly of the Murray/Darling form, but he also provided extensive information about the specimens from the coastal part of Queensland, including the form described herein as a new species.

Certainly he provided sufficient information within his book that

could easily be worked into a description not only of the relevant species named herein, but also the subgenus defined herein as well.

Prior to the publication of that book, I was fortunate enough to visit the facilities of Cann at La Peruse in Sydney's south (in New South Wales, Australia) and that of Craig Latta of Caringbah, southern Sydney, New South Wales, Australia, both of whom had extensive collections of terrapins, including *C. expansa sensu lato*, (and both eastern and western specimens at a single site) as well as the facilities of other enthusiasts such as Darren Green, then of Bendigo, rural Victoria (Australia), who between them had living specimens of all known regional variants of *C. expansa sensu lato*.

Numerous photos taken of relevant specimens, along with associated records, were stolen in the illegal armed raid of 17 August 2011, never returned and are therefore not available to be published herein.

Cann (1998) on page 81, also published excellent photos of the holotype specimen of *C. expansa* Gray, 1856 in the British Museum, which clearly shows the specimen as being of the Murray/Darling form.

I mention this because a number of correspondents, including Wüster via Yanega (2014) have made a lot of noise about myself not necessarily physically inspecting relevant holotypes prior to publishing some of my taxonomic works.

However what these people have failed to note is that if and when these specimens have been properly examined by others and good quality data on them is available, as seen in Cann (1998), the need for me to hold the specimen in my hot little hands in order to claim to have "inspected" them is in fact redundant.

Therefore, I make no apologies for not personally accessing the jar or polydrum with the holotype of *C. expansa* before publishing this paper.

In terms of the south-east Queensland animals (from coastal regions) the specimens within museums (notably the Queensland Museum in Brisbane, where relevant specimens were viewed briefly in 2001) in common with preserved

specimens everywhere tend to be faded, discoloured, stiff and pose problems for a good methodical inspection.

Fortunately I have had good access to live specimens over

Fortunately I have had good access to live specimens over

many years from many people in various parts of Australia and some of these people who gave me unfettered access to their

live specimens are acknowledged herein.

These are Robert Croft (formerly of St. Ives, NSW), Bill

Saunderson (formerly of St. Ives, NSW), Peter Richardson

(Bundaberg, NSW), John Cann (of La Peruse, NSW), Darren Green (formerly of Bendigo, Victoria) and Craig Latta (formerly of Caringbah, NSW).

Many others, especially within Victoria over the last 20 years have provided me with access to specimens of *C. expansa sensu lato* and other Australian terrapins, however they are too numerous to mention or even recall here.

I have also inspected live wild caught specimens at the following locations, Brisbane (Queensland) at various locations within a 50 km radius of the CBD, Moonie in south-west Queensland, Bourke, NSW, Tocumwal, Victoria, Swan Hill, Victoria, Mildura, Victoria, and a sizeable sample from 50 km south-east of Shepparton, Victoria (Goulburn River) at the Tabilk Winery, the majority from the preceding locations not actually being caught by myself.

C. expansa sensu lato has posed problems in terms of scientific study because of their relatively low population densities in the wild state and the general difficulty in finding and catching them, as compared to most other species of Australian freshwater terrapin.

The species is a bottom dweller of large water bodies such as big rivers and associated deep billabongs.

The species is typically an ambush predator, most commonly seen in muddy waters and hence doesn't lend itself to being caught by casual observers.

By way of example, in a ten year period, Peter Richardson had just three specimens brought to him at his Bundaberg Reptile Park, versus many dozens of each of the other locally occurring terrapin species.

Experienced collectors seeking the species have usually been able to obtain specimens by means of traps and nets, which I also found to be the best method of catching them in large slowflowing watercourses.

In rare situations where they live in clear waters, such as on Fraser Island, Queensland, the species is best found by diving. In early 2014, Hodges *et al.* published a paper that did a range-wide examination of the mitochondrial phylogeographical structure for *C. expansa sensu lato.*

Not surprisingly their results corroborated the physical data of Cann (1998).

I mention this in view of the fact that a lot of herpetologists at the current time (2014) seem to have this idea that in the absence of molecular data, one should not engage in reptile taxonomy of any form.

I reject this on the basis that more often than not, one can arrive at the same relevant position and conclusions by simply looking at the physical evidence. Molecular data does in fact usually merely reflect this.

The individuals within the species themselves know who is who in the zoo, so to speak and do not rely on molecular data before deciding who to breed with!

In summary, Hodges *et al.* (2014) merely confirmed what has already been known for decades.

However in the face of the molecular data presented by Hodges *et al.* and the physical data presented by Cann (1998) it is remiss not to taxonomically recognize the relevant taxa within the *C. expansa* species complex.

Hence within this paper, I merely state the obvious by formally defining and naming the relevant taxa.

In common with a number of aquatic species, *C. expansa sensu lato* appears to have struck a physical barrier in the form of the Conondale Range in south-east Queensland. The specimens found north of there (Mary River drainage and north) are substantially different to those from south of there, including both coastal and inland animals (those west of the Great Dividing Range).

It is those north of the Mary River drainage that are hereby assigned to a newly named species.

The specimens south of the Conondale Range (from coastal drainages of south-east Queensland) while similar to those from the Murray Darling basin, are sufficiently divergent as to warrant being recognized as a subspecies and these too are formally named for the first time.

Hodges *et al.* further provide a molecular basis for this action, finding the northern population to be divergent from the rest by 4.2 million years and the other two populations to have diverged from one another about 1.1 million years ago. Based on these numbers alone the correct designation for the two groups are as species (for the more divergent group) and as subspecies for each other in terms of the two remaining groups.

I also note that the (until now) unnamed species and an unnamed subspecies both occur in south-east Queensland, a region of strong human population growth, massive ongoing environmental degradation and anti-wildlife governments. In line with Hoser (1991) and Engstrom *et al.* (2002), I note that it is therefore essential that these two taxa be formally recognized as a first step towards ensuring the long-term protection of the relevant species and subspecies. Engstrom *et al.* (2002) wrote: "The documentation of this

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diversity must be seen as an activity that is done not just for posterity but for immediate action and protection."

This paper formally names each of these taxa and also places the trio (*C. expansa, C. duboisi sp. nov.* and *C. brisbaneensis subsp. nov.*) into a new subgenus *Supremechelys subgen. nov.*. In terms of the subgenus formally named for the first time, an explanation is in order.

All Australian long-necked terrapins were until 1985 placed in a single genus *Chelodina*.

Wells and Wellington (1985) created *Macrochelodina* as a genus for the so-called "*Chelodina rugosa*" group (the wide-ranging northern species formerly known as *C. rugosa* has recently been shown to in fact be *C. oblonga* as noted by Cogger 2014).

In the 1980's and 1990's there was a strong and unscientific campaign to suppress and black-ban usage of all Wells and Wellington names, that is effectively no different to the campaign being waged by Kaiser *et al.* (2013) now.

This was by pseudo-scientists who sought to steal the works of other scientists and later coin their own names for the very same taxa.

Ultimately this campaign failed and zoologists revisited the original works of Wells and Wellington and used their names as appropriate.

There seems to be no doubt at all that *Macrochelodina* as defined by Wells and Wellington should be recognized as a separate genus (within the ambit of a tribe or similar), but until recently few if any authors used the name *Macrochelodina* in any context at all.

However the ultra-conservative Hal Cogger in Cogger (2014) used *Macrochelodina* as a subgenus to include *C. oblonga* (as now recognized) and others in this species group.

He also used the subgeneric name *Macrodiremys* McCord and Joseph-Ouni (2007), (proposed by the men as a genus in 2007) as intended by the pair for what they had thought at the time was *C. oblonga*, (but was in fact *C. colliei* Gray, 1856).

There is a genuine likelihood that the name *Macrodiremys* as proposed may therefore be a junior synonym of *Macrochelodina* by strict interpretation of the 1999 (starting year 2000) Zoological Code.

However it would not be ethical for me to rename the genus (or subgenus) with a view to scooping name rights of the original authors. This is especially in light of the fact that Cogger (2014) has used the name *Macrodiremys* as intended by the original authors.

As I have said many times in the past: It is not important who names the animals, but rather that the animals are named correctly.

Having said this, I strongly urge the authors McCord and Joseph-Ouni to publish a new paper sorting out nomenclatural issues in terms of their name *Macrodiremys* so as to properly remove any doubts as to the applicability of the name to the relevant taxon, not just for their sake, but for the benefit of taxonomists and users of the nomenclature in years to come.

There is also little doubt that the *Chelodina expansa* species complex is also closely associated with the type species of *Macrochelodina* as originally defined by Wells and Wellington in 1985, which clearly explains why the taxon has been placed in the genus or subgenus as variously defined ever since.

All species share a similar breeding biology in sharp contrast with the other two groups (*Chelodina* and *Macrodiremys* as variously defined) and are separated from the other groups by the fact that the carapace is approximately oval; the plastron is of moderate length and less than twice as long as wide when measured anterior to the bridge.

However it is clear that the *expansa* species complex is sufficiently divergent to the *C. oblonga* (formerly *rugosa*) species complex (see treatment by Cogger 2014) as to warrant taxonomic recognition at the subgenus level at least.

With species inside the *C. expansa* species complex having diverged at over 4 million years and the significant and consistent differences between these animals and all within the *C. oblonga* group, it is likely that the relevant groups diverged in excess of 10 million years ago.

However, in the absence of robust calibrated molecular data, such a conclusion cannot definitively be made.

Notwithstanding this uncertainty, the molecular data provided by Hodges *et al.* (2014) is sufficient to assign the *C. expansa* group to its own subgenus.

This is therefore done herein. The subgenus *Supremechelys subgen. nov.* is named such in recognition of the larger (superior) size of the species in this group, as opposed to the sizes of all other living Australasian *Chelodina* species.

The name is also assigned noting the names of the other subgenera includes both *Chelodina* and the larger *Macrochelodina*, this being a group that includes smaller species than *Supremechelys subgen. nov.*

OTHER ETYMOLOGIES AND NOMENCLATURAL MATTERS

John Cann has spent a lifetime working with Australian testudines and his contribution in this regard is unmatched. He is known as Australia's "turtle man", although I note that in the 1970's he referred to these animals as "Freshwater Tortoises" (Cann 1978), later taking on the American name "Turtles" for the same animals in his 1998 book (Cann 1998).

In light of all this, my normal instinct would be to name the new species in his honour. However a number of Australian reptile species have already been named after him, including for example *Chelodina canni* McCord and Thomson, 2002. Therefore to name yet another species in his honour, even by varying the patronym, would cause confusion and potential instability in terms of the application of the rules and recommendations of the code of zoological nomenclature.

Notwithstanding the preceding, I should note that *Chelodina canni* McCord and Thomson, 2002 (McCord and Thomson, 2002) is without doubt a junior synonym for *C. rankini* Wells and Wellington 1985.

McCord and Thomson (2002) and the same authors since have widely promulgated the false claim that the Wells and Wellington (1985) name is *nomen nudem* according to the Zoological Codes in force as of the time of the original 1985 paper was published and/or since.

However a reading of the hard copy original of the Wells and Wellington (1985) paper clearly shows the claim of McCord and Thomson to be false and usage of the name *Chelodina canni* McCord and Thomson 2002 by others including Cogger (2014) to be in error and in direct breach of the Zoological Code's rules. *Nomen nudem* is defined in the 2000 Zoological Code (Ride *et al.* 1999) as:

"nomen nudum (pl. nomina nuda), n.

A Latin term referring to a name that, if published before 1931, fails to conform to Article 12; or, if published after 1930, fails to conform to Article 13. A *nomen nudum* is not an available name, and therefore the same name may be made available later for the same or a different concept; in such a case it would take authorship and date [Arts. 50, 21] from that act of establishment, not from any earlier publication as a *nomen nudum*."

The relevant parts of Article 13 of the Zoological Code reads as follows:

"13.1. Requirements. To be available, every new name published after 1930 must satisfy the provisions of Article 11 and must

13.1.1. be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon, or

13.1.2. be accompanied by a bibliographic reference to such a published statement, even if the statement is contained in a work published before 1758, or in one that is not consistently

binominal, or in one that has been suppressed by the Commission (unless the Commission has ruled that the work is to be treated as not having been published [Art. 8.7])." In order to confirm the obvious fact that the Wells and Wellington description of *Chelodina rankini* is in fact code compliant and definitely not *nomen nudum*, I hereby copy the entire text of their description from page 8 of their 1985 paper below:

"Chelodina rankini sp. nov.

Holotype: British Museum (Nat. Hist.) 1908.2.25.1 from the Lower Burdekin River, north east Queensland.

Diagnosis: A comprehensive description of this species is found in Cann, (1978) where it is regarded as Chelodina novaequineae. Chelodina novaequineae is the closest relative of Chelodina rankini but the former is confined to the island of New Guinea. Chelodina rankini is distributed along the north-east coast of Australia from Cape York Peninsula to just south of Townsville, Qld. Cann (1978) gives an excellent account of the distribution and general biology of Chelodina rankini (as Chelodina novaeguineae) and provides colour illustrations (Plate 16) of a juvenile from Edith River, Cape York Peninsula, as well as a juvenile from Herbert River, Queensland (Plate 18), and an adult (Plate 19) from Greta Creek, Queensland. A juvenile Chelodina novaeguineae is figured by Cann (1978: Plate 17) also. This should be compared with Plate 69 of Cogger (1983) being of Chelodina novaeguineae and Plates 399-400 showing what is here regarded as Chelodina rankini. Whitaker, Whitaker and Mills (1982:10) figures a specimen of C. novaequineae. Morphological data on Chelodina rankini (as Chelodina novaeguineae) is also provided by Cogger (1983:142). Goode (1967:32) provides morphological comparisons between Chelodina novaeguineae from Katow River, New Guinea and Chelodina rankini (cited as Chelodina novaequineae) from the Lower Burdekin River, N. E. Queensland (Brit. Mus. No. 1908.2.25.1). Goode (1967: Plate 22) also published an illustration of what is herein regarded as Chelodina rankini from Townsville, Queensland. We also take this opportunity to designate as Lectotype of Chelodina novaeguineae, BMNH 1946.1.22.36, from Mawatta, Binaturi River (as Katow), Papua New Guinea.'

While no etymology is given, it is evident from other writings of

Wells and Wellington, that the taxon was named in honour of

Sydney, Australia based herpetologist Peter Rankin.

Of significance however in terms of the deliberate over-writing of the valid name *C. rankini* Wells and Wellington with *C. canni*, is that McCord and Thomson (2002) and by their actions since have acted in defiance and contempt of the rules of zoological nomenclature.

They have recklessly created ongoing instability and confusion by recklessly peddling their invalidly coined name and through their demonstrably false claims against the Wells and Wellington paper. That McCord and Thomson (2002) did this in order to steal the work of Wells and Wellington for their own selfgratification is without doubt.

What is even more disturbing is how in this age of internet, Wikipedia pages (regularly edited by Thomson and others in the Wüster gang) and other pseudo-experts, how easy it has become for lies that destabilize the zoological nomenclature to be peddled with a high degree of success via online and associated means.

Through the reckless determination of Scott Thomson in particular the junior synonym *C. canni* has moved into widespread usage and even among those aware of the Wells and Wellington name from 1985, most erroneously believe that the Wells and Wellington name was in fact a *nomen nudem*! The reason?

None of these people bothered to consult the primary literature! This says something about the scientific method employed by a number of so-called scientists, including in the case of Cogger (2014), who appears to have accepted the statement of Thomson and McCord (2002) without bothering to check the primary literature.

In my case, I saw the (2002) claim the Wells and Wellington name was a *nomen nudem* and then rather than uncritically accepting and believing it, I checked the two relevant documents, these being the Wells and Wellington (1985) paper and the Zoological Code (Ride *et al.* 1999) as well as the two relevant earlier editions of the Zoological Code.

In doing so I found the claim false and it is an indictment of many (so called) herpetologists that few others have followed this simple scientific exercise!

In passing I must also mention that *Myuchelys* Thomson and Georges, 2009 is an unethically coined name by Thomson and Georges (2009) that is a junior synonym of *Wollumbinia* Wells, 2007. Thus the name *Myuchelys* should never be used, as it was recklessly coined in breach of the rules of the Zoological Code.

I note herein that Thomson has therefore repeatedly engaged in acts of "taxonomic vandalism", this being defined herein as "the reckless creation of junior synonyms for established taxa in direct breach of the rules of the Zoological Code".

The next two people whom I'd seek to honour by naming an Australian testudine in honour of would (not coincidentally) be Richard Wells and Cliff Ross Wellington. Both have been grossly underestimated by other herpetologists and while their works have not been perfect, they have been very unfairly maligned by the majority of supposedly professional herpetologists within Australia in the 20 years post dating their big papers of 1983 and 1985.

One need look no further than McCord and Thomson (2002) to get an idea of the sort of treatment Wells and Wellington have had from their "peers" in the decades following their 1985 publication.

Furthermore, I could cite many similar such cases of fraudulent claims and actions by others with respect to Wells and Wellington's papers and names properly proposed by them (e.g. Reynolds *et al.* 2013a, 2013b, 2014).

However, I have already named numerous taxa in honour of both Wells and Wellington (and quite appropriately so I might add), and in recognition of (false) claims by the Wüster gang that I am using patronyms as some kind of uncritical acceptance of the work of these two men, I shall refrain from naming either of these taxa in their honour.

I should also mention that I regularly disagree with taxonomic views and publications of Wells and Wellington, but due to the agenda of Wüster *et al.*, these disagreements are rarely mentioned.

However where the rules of science dictate their names be used, I will not stoop to the level of Thomson, Reynolds *et al.* and others in the Wüster gang to steal their work for the purposes of taking "name rights" over taxa. Instead I treat the two men and their work no different to that of any other publishing taxon-naming scientists.

The species formally named in this paper is named in honour of Dr Alain Dubois, who in 2014 was working at Muséum National d'Histoire Naturelle, Department of Systematics and Evolution, in Paris, France.

This is in recognition for his defence of the zoological code (Ride *et al.* 1999) and previous versions of the same document from taxonomic vandalism by others who set to operate outside of the code and use their own coined names in favour of properly proposed scientific names.

Dubois publicly supported the works of Wells and Wellington (1983 and 1985) in the face of unwarranted attacks from others who sought to steal the work of these authors and put their own coined names on the taxa first scientifically described by Wells and Wellington (Dubois *et al.* 1988).

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More recently, he defended the code from similar actions by others and highlighted improper actions within the ICZN secretariat by people who had apparently hijacked the organisation to further their own unscientific, code violating activities (Dubois 2005).

In 2014, Dubois came out in support of myself against the reckless and unwarranted attacks by the Wüster gang, as stated via the documents Kaiser (2012a, 2012b, 2013, 2014a, 2014b) and Kaiser *et al.* (2013), (Dubois 2014).

I have no hesitation in having etymologies for species in honour of people who have made significant and lasting contributions to science and in this case the actions of Alain Dubois are clearly worthy of such recognition.

Furthermore an etymology for the new species relying on physical traits of the animal will invariably lead to confusion with the better-known *C. expansa* and so I reject this idea for this taxon.

In terms of the subspecies from south-east Queensland, I have chosen to give the taxon a geographical-based name.

Within Australian species of terrapin, geographical-based names have been rarely used and so there is little prospect of confusion regarding this taxon. Furthermore, the subspecies has a very restricted distribution, being found exclusively within a few hours drive of Queensland's largest city, Brisbane, making the name *brisbaneensis* perfectly suited.

Furthermore, noting that the subspecies is easily the largest and most distinctive freshwater species from the Brisbane area, the name will be easily remembered by lay people and therefore be easier for them to identify and recognize from a conservation perspective.

THEFT OF MATERIALS TO IMPEDE SCIENCE AND WILDLIFE CONSERVATION.

I also note the following: In 2006 an online petition sponsored by a group of animal-hating pseudo-scientists including Wolfgang Wüster, Mark O'Shea, David John Williams, Bryan Fry and others posted at: http://www.aussiereptileclassifieds.com/ phpPETITION (Hunter *et al.* 2006) called for my successful wildlife education business (Snakebusters®) and all my other herpetological activity to be shut down by the government of Victoria, Australia.

These men were successful in that after a ruthless five-year campaign, on 17 August 2011, 11 heavily armed police and wildlife officers conducted a highly illegal and violent raid on our family home and research facility. The raid was also a reprisal for several publications I had made that were highly critical of corruption involving the relevant people (e.g. Hoser 1993, 1996, 2010).

Myself, my wife and two vulnerable young daughters were arrested at gunpoint and held captive in the kitchen of the house for nine hours while the facility was ransacked. Besides the unspeakable acts of killing captive snakes and criminal damage to cages and household goods, the raiding officers illegally shut down our business and effectively placed myself under house arrest at gunpoint for some months after the raid. An application by myself to the Supreme Court of Victoria led to the re-opening of our unlawfully shut down wildlife education business, although much of the damage to the business and our reputation built up over more than 4 decades was irreparable. Of greater relevance here is that at the time of the raid, research files spanning more than 40 years were taken and never returned, including materials and records relevant to this paper. Material taken included all the computers, disks, hard drives, backups, cameras, scientific literature and other forms of information and information storage at the facility. All were loaded into the back of a truck and trailer and carted off.

Faced with the dilemma of deciding whether to spend another forty years gathering data, by which time I may be dead from old age, being aged 52 as of 2014, or publishing the relevant paper/ s with minimal data, I have opted to publish.

Underlying this motivation has been an increasing concern that a delay to formally identify and name undescribed biodiversity may lead to its extinction before another scientist gets around to the matter.

Engstrom *et al.* (2002) wrote: "The documentation of this diversity must be seen as an activity that is done not just for posterity but for immediate action and protection."

A number of authors including Kaiser (2012a, 2012b, 2013, 2014a and 2014b), Kaiser *et al.* (2013), Naish (2013) and Wüster *et al.* (2014), all part of the group of people effectively controlled by Wolfgang Wüster of Wales, UK, have been highly critical of the fact that I have assigned names to unnamed clades of snakes and more recently for other reptiles. Their unscientific and childish attacks, continued incessantly on social media such as Facebook and Twitter are rejected herein as destabilizing the nomenclature, impeding the progress of science and in some cases putting people's lives at risk.

Their ridiculous comments and false and defamatory statements are systematically rebutted by Hoser (2013), as well as Cogger (2013, 2014), Dubois (2014), Eipper (2013), Mutton (2014a, 2014b), Shea (2013a-d), Thorpe (2013, 2014a-c), Wellington (2013, 2014a, 2014b), Wells (2013, 2014a, 2014b), and many others, so this history is not reviewed here.

I also note that many taxa formally named by myself for the first time in earlier publications (e.g. Hoser 2000a, 2000b) are in fact threatened species.

Therefore I note the sensible remarks of Engstrom *et al.* (2002) as a perfectly reasonable explanation for the publishing of taxon descriptions for such unnamed groups. This remains the case even if a sizeable amount of my original research, files, photos and data have been stolen (more than once) and therefore cannot be relied upon and incorporated into these contemporary publications.

Other important references relevant to the *C. expansa* species complex, not yet cited herein include the following: Cann (1981), Chessman (1978), Fritz (1993), Gaffney (1977), Georges *et al.* (2002), Goode (1968, 1974), Goode and Russell (1968), Gray (1857a, 1857b), Hamann *et al.* (2008), Legler (1978), Winkler (2006) and sources cited therein.

NOMENCLATURAL STATEMENT IN TERMS OF THE DESCRIPTIONS WITHIN THIS PAPER

Unless mandated by the zoological code, no names proposed within this paper should be amended in any way for the purposes of correction, gender change or the like. In terms of priority of names in the event of conflict, where more than one newly named taxon is deemed conspecific or within a single taxon group by a later author, the priority to be taken is by page priority, this meaning the first taxon described in full is the one to take precedent.

However in potential contradiction of the preceding, the name *duboisi* should take priority over *brisbaneensis* in the event of conflict between the two.

SUBGENUS SUPREMECHELYS SUBGEN. NOV.

Type species: Chelodina expansa Gray, 1857.

Diagnosis: The subgenus *Supremechelys subgen. nov.* is separated from all other *Chelodina* (a genus found in the Australasian bioregion) by the following suite of characters: The carapace is approximately oval; the plastron is of moderate length and less than twice as long as wide when measured anterior to the bridge (these unique traits also shared with the subgenus *Macrochelodina*); the second and third vertebrals are longer than wide (as opposed to the reverse in *Macrochelodina*) and the anterior lobe of the plastron is not beginning to taper immediately in front of the bridge (as opposed to doing so in *Macrochelodina*). In adult *Supremechelys subgen. nov.* the side marginals are inflected up, whereas this is not the case in *Macrochelodina*.

Supremechelys subgen. nov. are without doubt the largest

extant species of long-necked terrapin in Australia with large specimens having a carapace length of up to 50 cm.

Distribution: The Murray-Darling River system of south east inland South Australia, inland Victoria and New South Wales and southern inland Queensland, as well as nearby coastal parts of south-east Queensland, north to the vicinity of Rockhampton (Fitzroy River drainage), Australia.

Content: Chelodina expansa Gray, 1857 (type species); C. duboisi sp. nov.

CHELODINA (SUPREMECHELYS) EXPANSA GRAY, 1857.

Syntype: BMNH 1947.3.4.21

Diagnosis: The species *C. expansa* is readily separated from the newly described species *C. duboisi sp. nov.* described below by having a brownish carapace in adults (as opposed to black in *C. duboisi*), rear marginals that do not drop off sharply (as seen in *C. duboisi sp. nov.*) and a plastron that does not taper markedly on the front lobe (as opposed to doing so in *C. duboisi sp. nov.*).

Notwithstanding the above, specimens of *C. expansa* from coastal regions of south-east Queensland (*C. expansa* brisbaneensis subsp. nov.) are separated from both nominate *C. expansa* and *C. duboisi* by the fall off in the rear marginals. In the taxon *C. expansa brisbaneensis subsp. nov.* they do noticeably fall away (not seen in nominate *C. expansa*), but not with the extreme downward drop as seen in *C. duboisi sp. nov.*

In spite of claims that *C. duboisi sp. nov.* attains the same size as *C. expansa*, I have never seen extremely large specimens of *C. duboisi sp. nov.*.

The largest *C. duboisi sp. nov.* I have seen was an adult from the Burnett River, Queensland, caught in the 1970's and measuring over 40 cm in carapace length.

The subgenus *Supremechelys subgen. nov.* for which this species is the type, is separated from all other *Chelodina* (a genus found in the Australasian bioregion) by the following suite of characters:

The carapace is approximately oval; the plastron is of moderate length and less than twice as long as wide when measured

anterior to the bridge (thee unique traits also shared with

Macrochelodina); the second and third vertebrals are longer than wide (as opposed to the reverse in Macrochelodina) and the

anterior lobe of the plastron is not beginning to taper

immediately in front of the bridge (as opposed to doing so in *Macrochelodina*). In adult *Supremechelys subgen. nov.* the side marginals are inflected up, whereas this is not the case in *Macrochelodina*.

Taxa within *Supremechelys subgen. nov.* are without doubt the largest extant species of long-necked terrapin in Australia with large specimens having a carapace length of up to 50 cm.

Distribution: The nominate form of *C. expansa* is restricted to the Murray-Darling River system of south east South Australia, inland Victoria and New South Wales and southern inland Queensland. While this is a huge area and includes a large number of watercourses, this includes Australia's main food growing and agricultural region and the rivers within the region are often treated by people as open sewers and subject to extreme degradation with both agricultural and chemical wastes.

C expansa brisbaneensis subsp. nov. described below is found in rivers and large freshwater lakes in south-east Queensland south of the Conondale Range. This is one of the most rapidly urbanising parts of Australia and a region of strong human population growth.

CHELODINA (SUPREMECHELYS) EXPANSA BRISBANEENSIS SUBSP. NOV.

Holotype: A male preserved specimen held at the Queensland Museum, Brisbane, Queensland, Australia, specimen number: J16109 from Rochedale, Queensland, Australia. The Queensland Museum is a government-controlled facility that allows access to its holdings by scientists.

Paratype: A preserved specimen held at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J23905 from Inala, Queensland, Australia. The Queensland Museum is a government-controlled facility that allows access to its holdings by scientists.

Diagnosis: The species *C. expansa* is readily separated from the newly described species *C. duboisi sp. nov.* described below by having a brownish carapace in adults (as opposed to black in *C. duboisi*), rear marginals that do not drop off sharply (as seen in *C. duboisi sp. nov.*) and a plastron that does not taper markedly on the front lobe (as opposed to doing so in *C. duboisi sp. nov.*).

Notwithstanding the above, specimens of *C. expansa* from coastal regions of south-east Queensland (*C. expansa brisbaneensis subsp. nov.*) are separated from both nominate *C. expansa* and *C. duboisi* by the fall off in the rear marginals. In the taxon *C. expansa brisbaneensis subsp. nov.* they do noticeably fall away (not seen in nominate *C. expansa*), but not with the extreme downward drop as seen in *C. duboisi sp. nov.*

C. expansa brisbaneensis subsp. nov. adults are characterised by a dark brown carapace as opposed to a mid to light brown carapace in most, but not all *C. expansa expansa.*

The subgenus *Supremechelys subgen. nov.* for which this species is the type, is separated from all other *Chelodina* (a genus found in the Australasian bioregion) by the following suite of characters:

The carapace is approximately oval; the plastron is of moderate length and less than twice as long as wide when measured anterior to the bridge (thee unique traits also shared with *Macrochelodina*); the second and third vertebrals are longer than wide (as opposed to the reverse in *Macrochelodina*) and the anterior lobe of the plastron is not beginning to taper immediately in front of the bridge (as opposed to doing so in *Macrochelodina*). In adult *Supremechelys subgen. nov.* the side marginals are inflected up, whereas this is not the case in *Macrochelodina*.

Supremechelys subgen. nov. are without doubt the largest extant species of long-necked terrapin in Australia with large specimens having a carapace length of up to 50 cm.

It should be noted that the entire range of the subspecies *C*. *expansa brisbaneensis subsp. nov.* is within a highly urbanised or rapidly urbanising region. Even those parts currently quarantined from residential development are being carved up into ever smaller subdivisions, while parks and reserves are at best only relictual pockets of a far wider ecosystem.

Due to the increased trade and movement of reptiles and the regular escapes and deliberate releasing of specimens, particularly terrapins, there is no doubt that the entire population's genetic integrity is at risk from the release of Murray-Darling *C. expansa* into the region, as well as a slightly lower risk of release of *C. duboisi* into the same population.

On this basis it would make sense for a genetically pure captive stock of this subspecies to be maintained.

Distribution: *C. expansa brisbaneensis subsp. nov.* is found in rivers and large freshwater lakes in south-east Queensland south of the Conondale Range. This is one of the most rapidly urbanising parts of Australia and a region of strong human population growth.

Etymology: Named in reflection of the main city that is the centre of distribution for the taxon.

CHELODINA (SUPREMECHELYS) DUBOISI SP. NOV.

Holotype: A preserved specimen held at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J83694 from the Burnett River, Bundaberg, Queensland, Australia. The Queensland Museum is a government-controlled facility that allows access to its holdings by scientists.

Paratype: A preserved specimen held at the Queensland Museum, Brisbane, Queensland, Australia, specimen number

J18360 from the Burnett River, Bundaberg, Queensland, Australia. The Queensland Museum is a government-controlled facility that allows access to its holdings by scientists.

Diagnosis: The species *C. duboisi sp. nov.* is readily separated from all *C. expansa* by the following suite of characters: Having a blackish carapace in adults, as opposed to dark or light brown in *C. expansa* (both subspecies); rear marginals that drop off very sharply to face downwards (as opposed to no significant drop off in *C. expansa expansa* or a minor deflection downwards in *C. expansa brisbaneensis subsp. nov.*); and a plastron that tapers off markedly on the front lobe (as opposed to not doing so in both forms of *C. expansa*).

In spite of claims that *C. duboisi sp. nov.* attains the same size as *C. expansa*, I have never seen extremely large specimens of *C. duboisi sp. nov.*.

The largest *C. duboisi sp. nov.* I have seen was an adult from the Burnett River, Queensland, caught in the 1970's and measuring over 40 cm in carapace length.

The subgenus *Supremechelys subgen. nov.* for which this species is the type, is separated from all other *Chelodina* (a genus found in the Australasian bioregion) by the following suite of characters:

The carapace is approximately oval; the plastron is of moderate length and less than twice as long as wide when measured anterior to the bridge (thee unique traits also shared with *Macrochelodina*); the second and third vertebrals are longer than wide (as opposed to the reverse in *Macrochelodina*) and the anterior lobe of the plastron is not beginning to taper immediately in front of the bridge (as opposed to doing so in *Macrochelodina*). In adult *Supremechelys subgen. nov.* the side marginals are inflected up, whereas this is not the case in *Macrochelodina*.

Taxa within *Supremechelys subgen. nov.* are without doubt the largest extant species of long-necked terrapin in Australia with large specimens having a carapace length of up to 50 cm.

Distribution: Coastal drainages and lakes from the Mary River System, Queensland in the south to the Fitzroy River System, central coastal Queensland in the north and including waterways on the northern half of Fraser Island, Queensland.

Etymology: The species is named in honour of Dr Alain Dubois, who in 2014 was working at Muséum National d'Histoire Naturelle, Department of Systematics and Evolution, in Paris, France, in recognition for his defence of the zoological code (Ride *et al.* 1999) and previous versions of the same document from taxonomic vandalism by others who set to operate outside of the code and use their own coined names in favour of properly proposed scientific names.

CONFLICT OF INTEREST

This author reports no conflict of interest in terms of any material within this paper.

RERERENCES CITED

Cann, J. 1978. *Tortoises of Australia*. Angus and Robertson, Sydney and London:79 pp.

Cann, J. 1981. Confessions of a tortoise freak. *Geo* (Australian Geographic Magazine) 3(2):50-69.

Cann, J. 1998. Australian Freshater Turtles. John Cann (Australia) and Beaumont Publishing, Singapore:292 pp.

Chessman, B. C. 1978. *Ecological studies of freshwater turtles in south-eastern Australia*. Ph.D. Thesis, Monash University, Melbourne, Australia.

Cogger, H. G. 2013. Email to Raymond Hoser, 17 August 2013. Cogger, H. G. 2014. *Reptiles and Amphibians of Australia,*

Seventh Edition, CSIRO Publishing, Sydney, NSW, Australia.

Dubois, A., Bour, R., Brygoo, E. and Lescure, J. 1988. Comment for the proposed suppression for nomenclature of three works by R. W. Wells and C. R, Wellington. *Bulletin of Zoological Nomenclature* 45(2):146-149. Dubois, A. 2005. Proposed Rules for the incorporation of nomina of higher-ranked zoological taxa in the International Code of Zoological Nomenclature. 1. Some general questions,

concepts and terms of biological nomenclature. *Zoosystema* 27(2):365-426.

Dubois, A. 2014. Email to Raymond Hoser, 14 May.

Eipper, S. 2013. Post on Facebook, 16 December 2013.

Engstrom, T. N., Bradley Shaffer, H. and McCord, W. P. 2002. Phylogenetic Diversity of Endangered and Critically Endangered Southeast Asian Softshell Turtles (Trionychidae: *Chitra*). *Biological Conservation* 104(2):173-179.

Fritz, U. 1993. Bemerkungen über das Werbeverhalten der Riesen-Schlangenhalsschildkröte (*Chelodina expansa*). *Herpetofauna* (Germany) 15(83):6-9.

Gaffney, E. S. 1977. The side-necked turtle family Chelidae: a theory of relationships using shared derived characters. *American Museum Novitates* (2620):1-28.

Georges, A. and Thomson, S. 2010. Diversity of Australasian freshwater turtles, with an annotated synonymy and keys to species. *Zootaxa* 2496:1-37.

Georges, A., Adams, M. and McCord, W. 2002. Electrophoretic delineation of species boundaries within the genus *Chelodina* (Testudines: Chelidae) of Australia, New Guinea and Indonesia. *Zoological Journal of the Linnean Society* 134(4):401-422.

Goode, J. 1968. Morphological variations in Victorian tortoises with special reference to the intermediate form of *Chelodina expansa. Vict. Nat.* 85:263-267.

Goode, J. 1974. *Turtles, tortoises and terrapins.* Angus and Robertson, Sydney, NSW, Australia:164 pp.

Goode, J. and Russell, J. 1968. Incubation of eggs of three species of chelid tortoises, and notes on their embryological development. *Australian Journal of Zoology* 15:749-761.

Gray, J. E. 1857a. Description of a new species of *Chelodina* from Australia. *Proc. Zool. Soc.* London 1856:369-371.

Gray, J. E. 1857. Description of a new species of *Chelodina* from Australia. *Ann. Mag. Nat. Hist.* (2)19:485-486.

Hamann, M., Schäuble, C. S., Emerick, S. P., Limpus, D. J. and Limpus, C. J. 2008. Freshwater turtle populations in the Burnett River. *Memoirs of the Queensland Museum* 52(2):221-232.

Hodges, K., Donnellan, S. and Georges, A. 2014. Phylogeography of the Australian freshwater turtle *Chelodina expansa* reveals complex relationships among inland and coastal bioregions. *Biological Journal of the Linnean Society*, 2014, 111:789-805 (with 3 figures).

Hoser, R. T. 1989. *Australian Reptiles and Frogs.* Pierson and Co., Mosman, NSW, Australia:238 pp.

Hoser, R. T. 1991. *Endangered Animals of Australia*. Pierson publishing, Mosman, NSW, Australia: 240 pp.

Hoser, R. T. 1993. *Smuggled: The Underground trade in Australia's wildlife.* Apollo Books, Moss Vale, NSW, Australia: 159 pp.

Hoser, R. T. 1994. *The Hoser Files: The fight against entrenched official corruption*. Kotabi publishing, Doncaster, Victoria, Australia:324 pp.

Hoser, R. T. 1996. *Smuggled-2:Wildlife trafficking, crime and corruption in Australia*. Kotabi publishing, Doncaster, Victoria, Australia:280 pp.

Hoser, R. T. 1999a. *Victoria Police Corruption: The book the Victoria Police don't want you to read*! Kotabi Publishing, Doncaster, Victoria, Australia: 736 pp.

Hoser, R. T. 1999b. *Victoria Police Corruption-2: Including what the media didn't tell you.* Kotabi Publishing, Doncaster, Victoria, Australia:800 pp.

Hoser, R. T. 2000a. A revision of the Australasian Pythons. *Ophidia Review* 1:7-27.

Hoser, R. T. 2000b. A new species of snake (Serpentes: Elapidae) from Irian Jaya. *Litteratura Serpentium* 20(6):178-186.

Hoser, R. T. 2010. Sam the scam: Sam the Koala is an imposter. *Australasian Journal of Herpetology*, 8:1-64.

Hoser, R. T. 2013. The science of herpetology is built on

evidence, ethics, quality publications and strict compliance with the rules of nomenclature. *Australasian Journal of Herpetology* 18:2-79.

Hunter, S. *et al.* 2006. Online hate petition to shut down Raymond Hoser, published at:

http://www.aussiereptileclassifieds.com/phpPETITION

Kaiser, H. 2012a. SPAM email sent out to numerous recipients on 5 June 2012.

Kaiser, H. 2012b. Point of view. Hate article sent as attachment with SPAM email sent out on 5 June 2012.

Kaiser, H. 2013. The Taxon Filter, a novel mechanism designed to facilitate the relationship between taxonomy and

nomenclature, vis-à-vis the utility of the Code's Article 81 (the Commission's plenary power). *Bulletin of Zoological Nomenclature* 70(4) December 2013:293-302.

Kaiser, H. 2014a. Comments on *Spracklandus* Hoser, 2009 (Reptilia, Serpentes, ELAPIDAE): request for confirmation of the availability of the generic name and for the nomenclatural validation of the journal in which it was published. *Bulleton of Zoological Nomenclature*, 71(1):30-35.

Kaiser H. 2014b. Best Practices in Herpetological Taxonomy: Errata and Addenda. *Herpetological Review*, 45(2):257-268.

Kaiser, H., Crother, B. L., Kelly, C. M. R., Luiselli, L., O'Shea, M., Ota, H., Passos, P., Schleip, W. D. and Wüster, W. 2013. Best practices: In the 21st Century, Taxonomic Decisions in Herpetology are Acceptable Only When supported by a body of Evidence and Published via Peer-Review. *Herpetological Review* 44(1):8-23.

Legler, J. M. 1978. Observations on behaviour and ecology in an Australian turtle *Chelodina expansa* (Testudines: Chelidae). *Canadian Journal of Zoology* 56(11):2449-2453.

McCord, W. P. and Joseph-Uoni, M. 2007. A New Genus of Australian Longneck Turtle (Testudines: Chelidae) and a New Species of *Macrochelodina* from the Kimberley Region of Western Australia (Australia. *Reptilia*, 31:56-64.

Western Australia (Australia. *Reptilla*, 31:56-64.

- McCord, W. P. and Thomson, S. 2002. A new species of
- Chelodina (Tesudines: Pleurodira: Chelidae) from Northern

Australia. Journal of Herpetology 36(2):255-267.

Mutton, N. 2014a. Private email (via Facebook) to Raymond Hoser. 6.31 AM, 30 May.

Mutton, N. 2014b. Two emails to Raymond Hoser, 9 June.

Naish, D. 2013. Taxonomic vandalism and the Raymond Hoser problem. Online blog at: http://blogs.scientificamerican.com/

tetrapod-zoology/2013/06/20/taxonomic-vandalism-and-raymond-hoser/

Reynolds, R. G., Niemiller, M. L. and Revella, L. J. 2013a. Toward a Tree-of-Life for the boas and pythons: Multilocus species-level phylogeny with unprecedented taxon sampling. *Molecular Phylogenetics and Evolution*, Uncorrected proof uploaded on 6 December 2013 to http://www.sciencedirect.com/ science/article/pii/S1055790313004284

Reynolds, R. G., Niemiller, M. L. and Revella, L. J. 2013b. Toward a Tree-of-Life for the boas and pythons: Multilocus species-level phylogeny with unprecedented taxon sampling. *Molecular Phylogenetics and Evolution*, Uncorrected proof uploaded on 6 December 2013 to http://www.venomdoc.com/ downloads/MPE_pythons.pdf

Reynolds, R. G., Niemiller, M. L. and Revella, L. J. 2014. Toward a Tree-of-Life for the boas and pythons: Multilocus species-level phylogeny with unprecedented taxon sampling. *Molecular*

Phylogenetics and Evolution, 71:201-203 (posted online at: http://www.sciencedirect.com/science/article/pii/S1055790313004284)

Ride, W. D. L. (ed.) *et al.* (on behalf of the International Commission on Zoological Nomenclature) 2000. *International code of Zoological Nomenclature*. The Natural History Museum, Cromwell Road - London SW7 5BD, UK (also commonly cited as "ICZN 1999").

Shea, G. 2013a. Email to Raymond Hoser dated Fri, 8 Mar 2013 04:29:39 +0000.

Shea, G. 2013b. Post on facebook at: http://www.facebook.com/ glenn.shea.73?ref=ts&fref=ts on 8

March at 7.51 AM.

Shea, G. 2013c. Post on facebook on 20 March at: http:// www.facebook.com/glenn.shea.73?ref=ts&fref=ts#!/ bryangrieg.fry?fref=ts

Shea, G. 2013d. Post on facebook on 20 March at: http:// www.facebook.com/glenn.shea.73?ref=ts&fref=ts#!/

bryangrieg.fry?fref=ts

Thomson, S. and Georges, A. 2009. *Myuchelys gen. nov.*: a new genus for *Elseya latisternum* and related forms of Australian freshwater turtle (Testudines: Pleurodira: Chelidae). *Zootaxa* 2053:32-42.

Thorpe, S. 2013. Post to the Taxacom listserver, 21 May.

Thorpe, S. 2014a. Post on Taxacom listserver, 13 April.

Thorpe, S. 2014b. Email to ICZN, 29 April.

Thorpe S. 2014c. Email to Doug Yanega and ICZN listserver, 6 July.

Wellington, C. R. 2013. Post on Facebook, 26 December.

Wellington, C. R. 2014a. Post on Facebook wall of Scott Eipper, 6 April.

Wellington, C. R. 2014b. Email to ICZN listserver and others on 9 July 2014.

Wells, R. W. 2007. Some taxonomic and nomenclatural considerations on the class Reptilia in Australia. A new genus of the family Chelidae from eastern Australia. *Australian Biodiversity Record* (3):1-13.

Wells, R. W. 2009. Some Taxonomic and Nomenclatural Considerations on the Class Reptilia in Australia. A New Species of Freshwater Turtle in the Genus *Wollumbinia* Wells 2007 (Reptilia: Chelidae) from Eastern Australia. *Australian Biodiversity Record* (1):1-12.

Wells, R. W. 2013. Post on Facebook, 18 December. Wells, R. W. 2014a. Post on Facebook wall of Scott Eipper, 6 April.

Wells, R. W. 2014b. Post on blogger.com, 7 July.

Wells, R. W. and Wellington, C. R. 1983. A synopsis of the class Reptilia in Australia. *Australian Journal of Herpetology*, 1 (3-4):73-129.

Wells, R. W. and Wellington, C. R. 1985. A classification of the Amphibia and Reptilia of Australia. *Australian Journal of Herpetology*, Supplementary Series, (1):1-61.

Winkler, J. D. 2006. Testing phylogenetic implications of eggshell characters in side-necked turtles (Testudines: Pleurodira). *Zoology* 109:127-136.

Wüster, W., Broadley, D. G. and Wallach, V. 2014. Comments on *Spracklandus* Hoser, 2009 (Reptilia, Serpentes, ELAPIDAE): request for confirmation of the availability of the generic name and for the nomenclatural validation of the journal in which it was published (Case 3601; see *BZN* 70: 234–237). *Bulletin of Zoological Nomenclature* 7(1):37-38.

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