Brazil is home to 20 of the 58 extant Chelidae species (Rhodin et al., 2017; Costa and Bérnils, 2018). Chelidae is distributed across Oceania and South America (van Dijk et al., 2014), and its most species-rich genus is Mesoclemmys, with eight species: *M. gibba*, *M. heliostemma*, *M. hoge*, *M. nasuta*, *M. perplexa*, *M. raniceps*, *M. tuberculata* and *M. vanderhaegei*. Mesoclemmys species occur widely across Brazil, but their distributions may still be underestimated. *Mesoclemmys vanderhaegei* is a medium-sized freshwater turtle, measuring up to 285 mm of carapace length (CL) (Marques et al., 2014). It inhabits freshwater systems such as rivers, small oligotrophic streams and densely vegetated open lagoons (Rueda-Almonacid et al., 2007; Vinke et al., 2013; Marques et al., 2014), and is currently considered Near Threatened by the IUCN Red List (Tortoise & Freshwater Turtle Specialist Group, 1996). This species is distributed across Argentina, Paraguay and Brazil (Marques et al., 2014), and has been recorded in the Amazon, Tocantins, Paraguay, Paraná and Uruguay basins (Souza, 2005; Marques et al., 2014). In Brazil, the species occurs at the Federal District, and in the states of Goiás (Brandão et al., 2002), Mato Grosso (Brito et al., 2009; Brito et al., 2012), Mato Grosso do Sul (Strüssmann et al., 2000; Ávila et al., 2006), Minas Gerais (Silveira et al., 2009; Maffei et al., 2016), São Paulo (Souza et al., 2000; Marques et al., 2013; Maffei et al., 2016) and Tocantins (Villaça et al., 1999). Tocantins, located 2000 km northeast from Asunción, is this species’ type locality and northern limit (Vinke et al., 2013).

Here, we extend the distribution of *M. vanderhaegei* to a new river basin in Maranhão State, Northeastern Brazil. In addition to these new records, we have compiled every known distribution record of this species. Our mapping was based on a thorough review of the literature (comprising journal articles, dissertations, theses and herpetological meetings publications) herpetological collections, SpeciesLink, GBIF, EMYSsystem and Portal da Biodiversidade databases. In order to minimize problems caused by georeferencing errors, we excluded records that were clearly misplaced or dubious. We used Ernst and Barbour (1989) and Rueda-Almonacid et al. (2007) identification keys to identify captured specimens. Every individual was released after biometrical measurements, sexing and species identification.

We captured two individuals of *M. vanderhaegei* in Balsas river, Balsas Municipality, State of Maranhão (8°39’S, 46°27’W; WGS84; Figure 1), in 2012. Both individuals were caught in funnel traps baited with fish, and were released after marking and measuring procedures. One female (CL of 200 mm; Head width, HW, of 4.6 mm; Figure 2A) and one male (CL of 207 mm; HW of 5.1 mm) were captured in February 26 and July 17, respectively. Our records extend the known distribution of *M. vanderhaegei* to a new North-Northeast hydrographic basin, the Parnaíba sub-basin. The area is located 241 km northeast of the species’ closest known locality in Serra do Lajeado, Tocantins State (Brandão et al., 2002). The Balsas River is a major affluent of the Parnaíba, and it is surrounded by Cerrado vegetation in southern Maranhão (Figure 2B).

The captured individuals were sympatric with six individuals of *Phrynops geoffroanus* complex in the Balsas river. The latter is distributed across the Parnaíba river basin (Silva et al., 2016), where another species

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Elizângela Silva Brito et al.

of *Mesoclemmys*, *M. gibba*, has already been recorded (Barreto et al., 2007). *Mesoclemmys gibba* is similar in size to *M. vanderhaegei*, but it is primarily distributed throughout the Amazon basin, where *M. vanderhaegei* occurs only peripherally (Rueda-Almonacid et al., 2007; Ferrara et al., 2017). The main characteristics separating the two species are the darker colors of the mandible and plastron of *M. gibba*, contrasting with

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**Figure 1.** *Mesoclemmys vanderhaegei* distribution. Species Link, GBIF, EMYSysterm, Portal da biodiversidade, scientific literature (black circles) and new records (red star).

**Figure 2.** *Mesoclemmys vanderhaegei* and Balsas river, Balsas municipality, Maranhão state, Brazil. (A) Captured female; (B) River section where *M. vanderhaegei* individuals were captured.
the paler hues of *M. vanderhaegei* (Figure 2A), and the wider head of *M. vanderhaegei* (larger than 20% HW in relation to CL) when compared to *M. gibba* (max of 20% HW in relation to CL) (Ernst and Barbour, 1989; Rueda-Almonacid et al., 2007; Ferrara et al., 2017).

The presence of *M. vanderhaegei* outside the Prata river basin was previously reported (e.g., Villaça et al., 1999; Silveira, 2009; Brito et al., 2012), and might be related to biological characteristics of semi-aquatic turtles, which can disperse across terrestrial landscapes. *Mesoclemmys vanderhaegei* has been observed walking on land, especially in areas where barriers such as waterfalls can limit its aquatic movement (Brito et al., 2012; Marques et al., 2014). This capacity allows the species to occur in different basins.

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