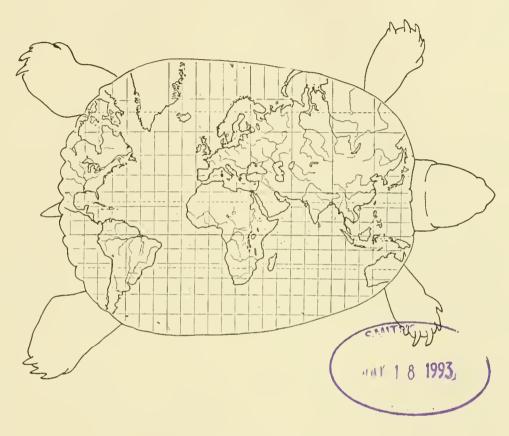
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SPECIES RICHNESS MAPS OF THE FRESHWATER AND TERRESTRIAL TURTLES OF THE WORLD



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INTRODUCTION

With the publication of my turtle checklist (Iverson, 1986) it was finally possible to begin preliminary analyses of the patterns and correlates of species richness in turtles on a global scale. As a first step I prepared species density maps for each turtle family by outlining the range of each turtle species as plotted in Iverson (1986), and manually overlaying those range maps to produce species richness isopleth (= species density) maps. This was undertaken with the clear realization that the taxonomy and distribution of turtles in some areas of the world was still not well studied (especially southeast Asia), but that general patterns of species density would not change radically even with much further study.

The species density maps that were generated revealed a number of interesting zoogeographic patterns, and stimulated a pilot study of the correlates of maximum freshwater and terrestrial turtle species density in 42 river basins across five continents (Iverson, 1991). However, because of journal space limitations, it was not possible to publish the species density maps along with that analysis. Those maps are reproduced here in hope of stimulating further analyses of the distribution and zoogeography of turtles. The maps appear in the same order as the taxa appeared in Iverson (1986).

LITERATURE CITED

Iverson, J. B. 1986. Checklist with Distribution Maps of the Turtles of the World. Iverson Publ., Richmond, Indiana.

Iverson, J. B. 1991. Global correlates of species richness in turtles. Herpetol. J. (in press)

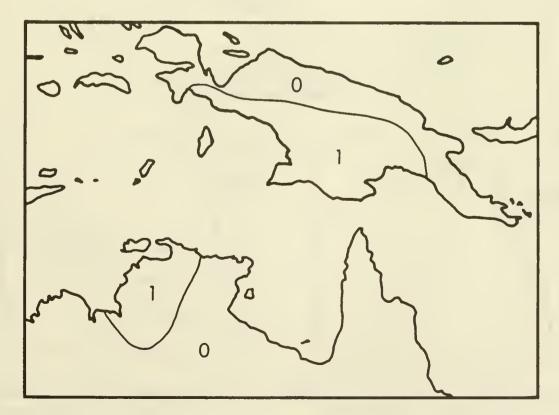


Fig. 1. Species richness of the family Carettochelyidae on New Guinea and Northern Australia.

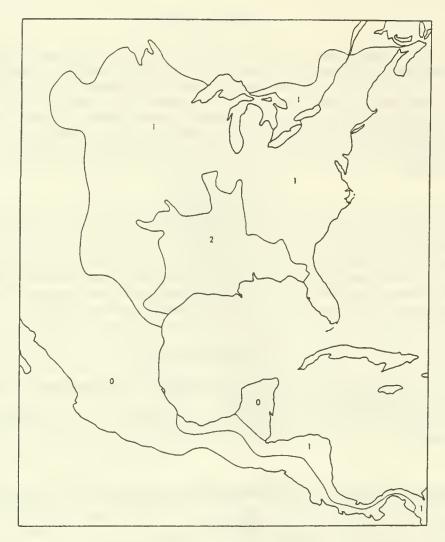
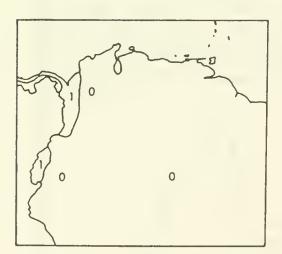


Fig. 2. Species richness of the family Chelydridae on North and Central America.



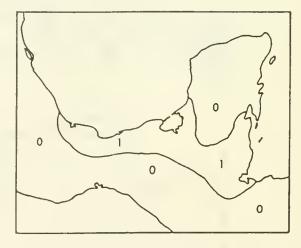


Fig. 3. Species richness of the family Chelydridae on northwestern South America.

Fig. 4. Species richness of the family Dermatemydidae on Mexico and Central America.

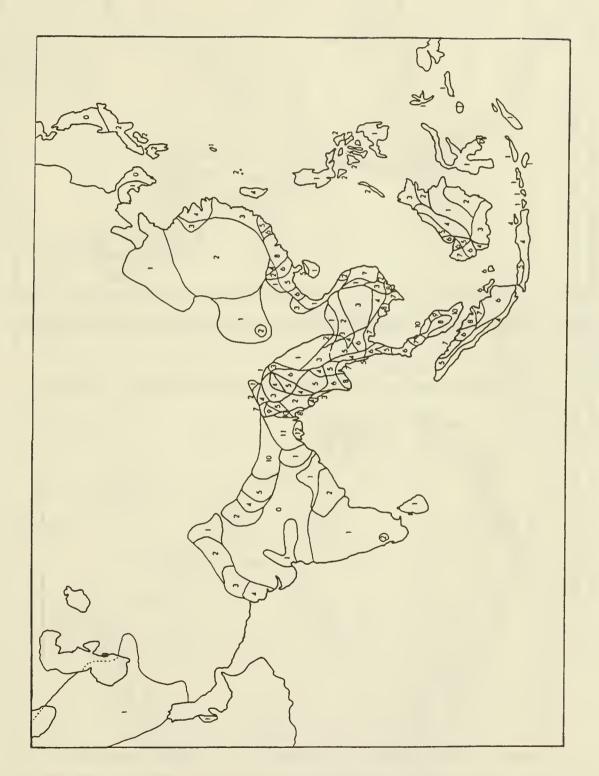


Fig. 5. Species richness of the subfamily Batagurinae (family Emydidae) on Asia.

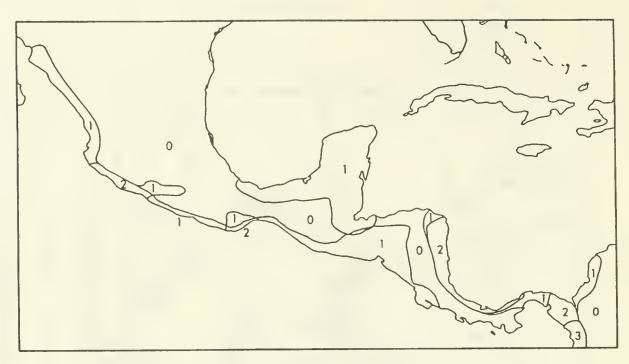


Fig. 6. Species richness of the subfamily Batagurinae (family Emydidae) on Central America.

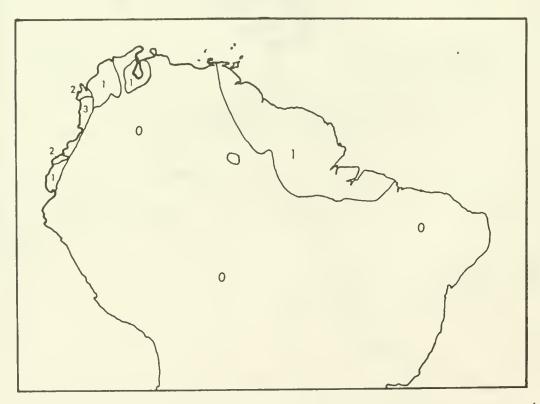


Fig. 7. Species richness of the subfamily Batagurinae (family Emydidae) on South America.

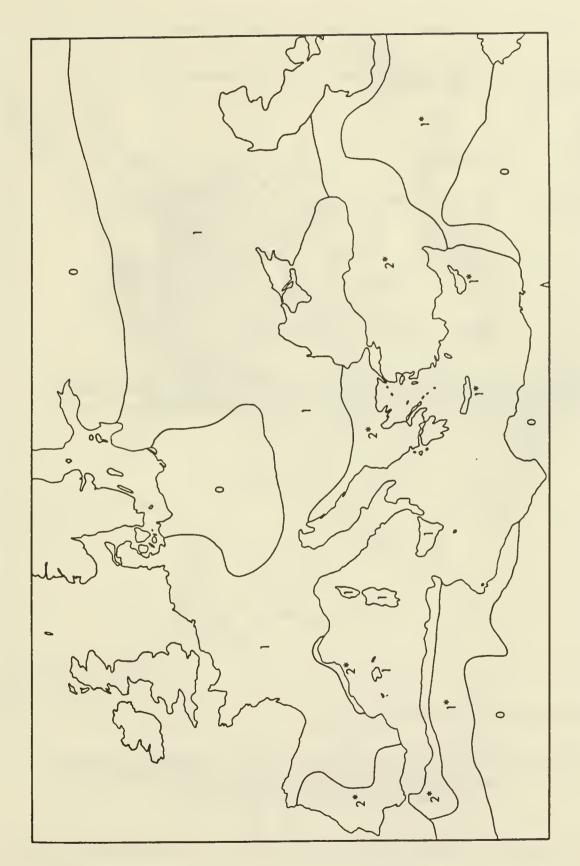


Fig. 8. Species richness of the subfamilies Batagurinae and Emydinae (family Emydidae) on Europe. Richness values marked with an asterisk indicate the presence of a single batagurine species.

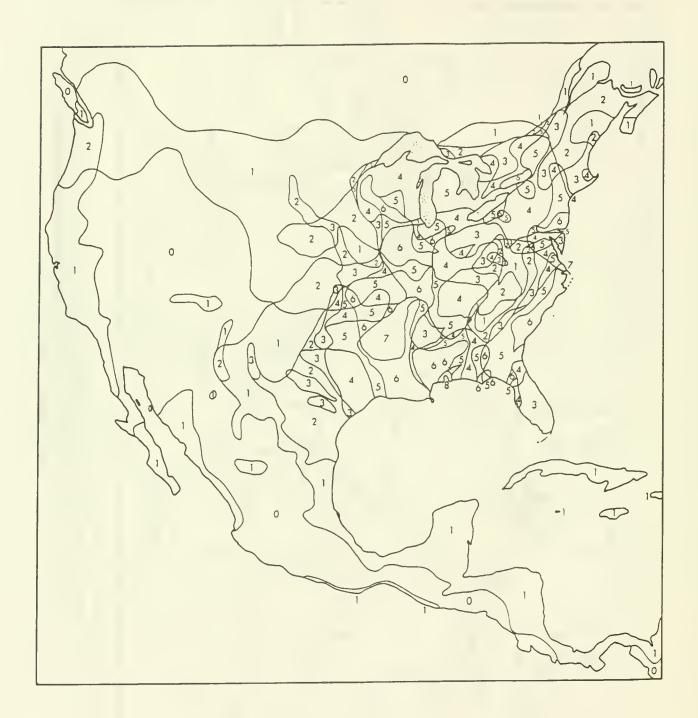


Fig. 9. Species richness of the subfamily Emydinae (family Emydidae) on North and Central America, excluding the box turtle genus *Terrapene* and the salt marsh terrapin genus *Malaclemys* (see Fig. 10).



Fig. 10. Species richness of the box turtles of the genus *Terrapene* and the salt marsh terrapin of the genus *Malaclemys* (subfamily Emydinae; family Emydidae) on North America (see Fig. 9). Dotted line parallels the coastline along which a single species of *Malaclemys* occurs.

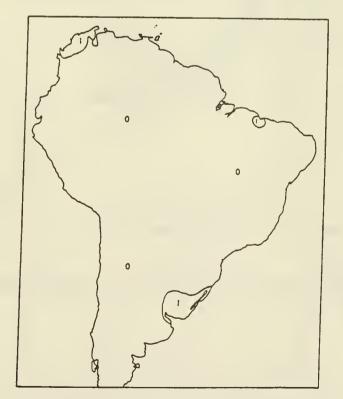


Fig. 11. Species richness of the subfamily Emydinae (family Emydidae) on northern South America.



Fig. 12. Species richness of the family Kinosternidae on North and Central America.

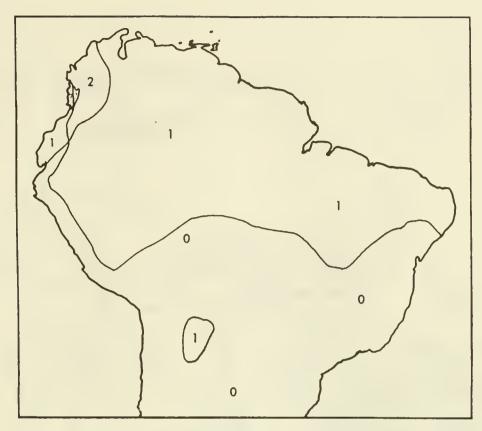


Fig. 13. Species richness of the family Kinosternidae on South America.

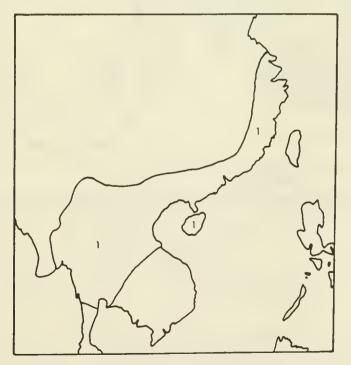


Fig. 14. Species richness of the family Platysternidae on Asia.

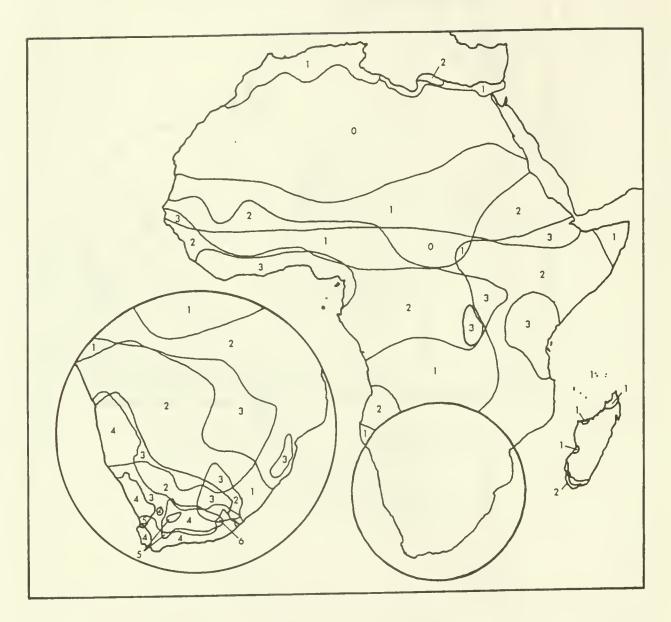


Fig. 15. Species richness of the family Testudinidae on Africa.

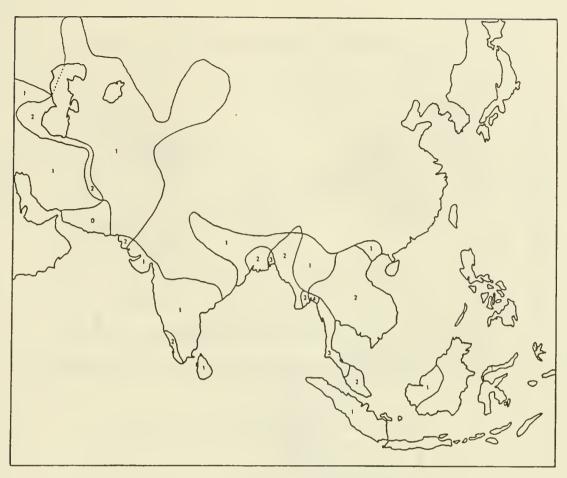


Fig. 16. Species richness of the family Testudinidae on Asia.

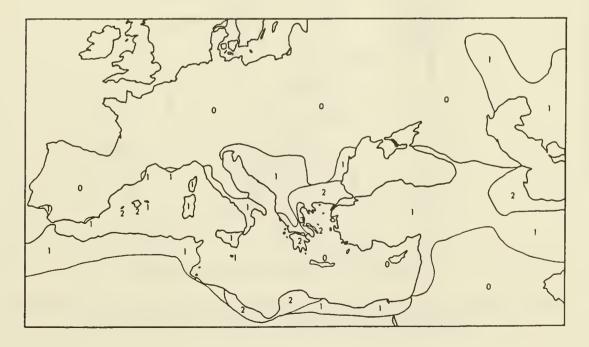


Fig. 17. Species richness of the family Testudinidae on Europe.

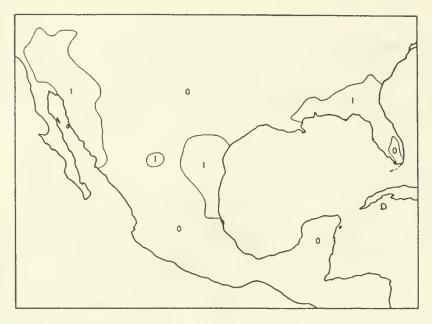


Fig. 18. Species richness of the family Testudinidae on North America.



Fig. 19. Species richness of the family Testudinidae on South America, excluding the Galapagos Islands where species richness never exceeds one.



Fig. 20. Species richness of the family Trionychidae on Asia (see also Fig. 21).

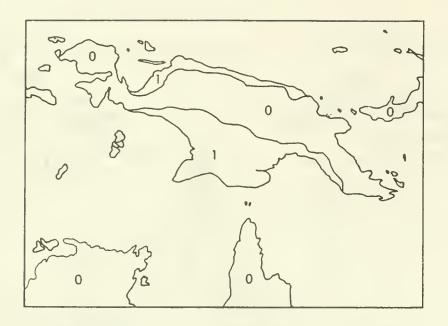


Fig. 21. Species richness of the family Trionychidae on New Guinea.

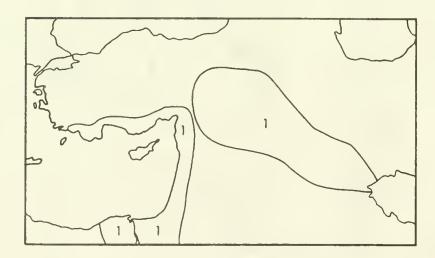


Fig. 22. Species richness of the family Trionychidae in the Middle East.

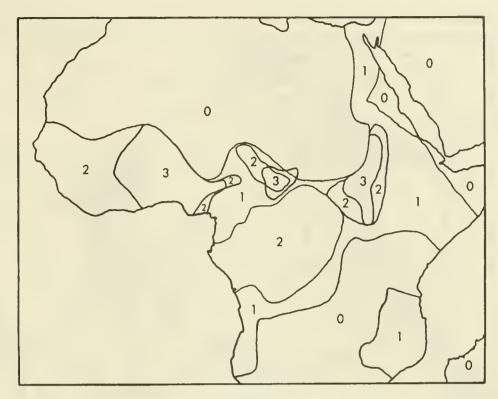


Fig. 23. Species richness of the family Trionychidae on Africa.

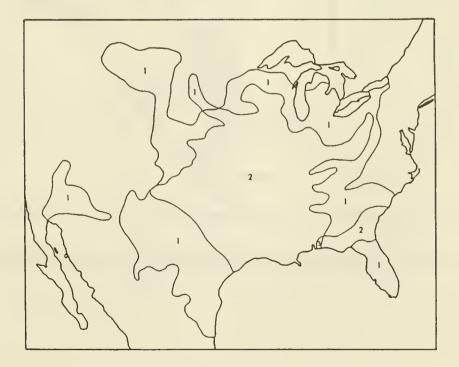


Fig. 24. Species richness of the family Trionychidae on North America.



Fig. 25. Species richness of the family Chelidae on South America.

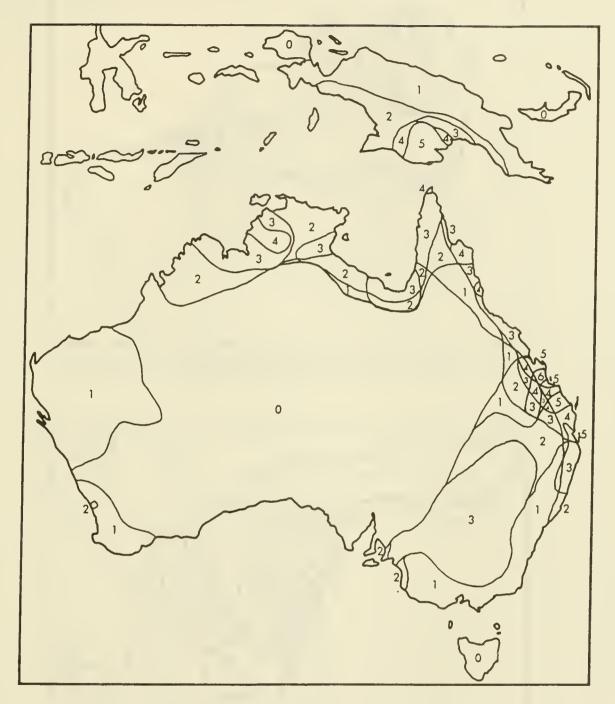


Fig. 26. Species richness of the family Chelidae on Australia.

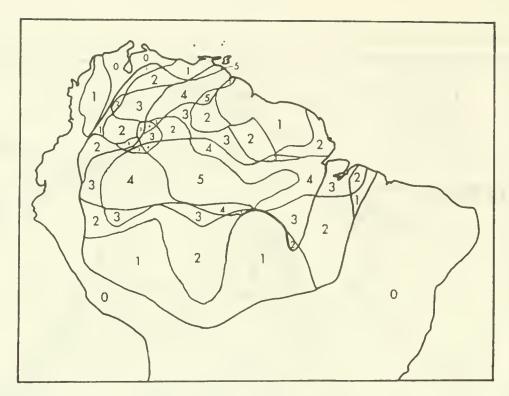


Fig. 27. Species richness of the family Pelomedusidae on South America.

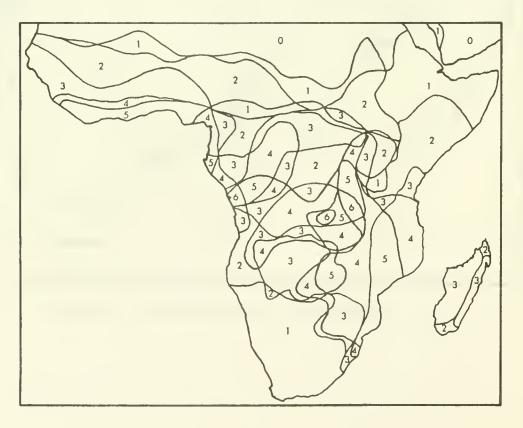


Fig. 28. Species richness of the family Pelomedusidae on Africa.