Agenda Item: SC. 3.5.

Crocodile Specialist Group Steering Committee Meeting Double Tree Hilton, Darwin, Australia

(15 April 2024)

Taxonomy and Identification Working Group

1. Living Crocodylians of the World list

- a. We have produced a list of the living crocodylians of the world. This is a living document that can be readily modified as new information becomes available. For the purposes of the Taxonomy and Identification working group, the list is a Google document available online to all members of the working group, so that notes, comments, or modifications can be made at any time by any member for our consideration. Once the list is reviewed by the CSG Chairs or Executive Committee, our suggestion to the Chairs is to post the list on the CSG website so that CSG members and the general public can see what the CSG considers to be the most up to date understanding of the taxonomy of living crocodylians. As an alternative, or in addition to, we have discussed the possibility of publishing the most current version once a year in the CSG Newsletter.
- b. The list currently includes 26 species, a slight increase from King and Burke 1989 (Crocodilians, Tuatara, and Turtle species of the World: A Taxonomic and Geographic Reference. Washington, D.C., Assoc. Systematic Collections) given the 35 years since that publication. This may surprise many who might have expected at least a couple more species to be listed, but this is representative of the mindful, conservative approach the working group has adopted in this process. A small number of additional taxa have been discussed but the group is waiting for more information to be formally published. Subspecies may be mentioned in the list but are not formally adopted or rejected by the group at this time.
- c. We do not consider any modifications to the list that have not already appeared in peer-reviewed literature. Publication is absolutely not the only criterion for inclusion.
- d. I thank those members of the working group who have very kindly and unselfishly shared their latest research, as yet unpublished, to help us have a more defined understanding of extant crocodylian diversity so that we may better foresee the work ahead of us as well as identify additional areas of research to be undertaken.
- 2. A significant amount of work in numerous laboratories over many years has been devoted to trying to understand the complicated genetics and phylogeography of *Crocodylus acutus* throughout the Americas and the Greater Antilles. This work continues resulting in continued refinement of hypotheses related to speciation, both ancient and recent hybridization, and population structure in these crocodiles.
- 3. There has been a remarkable expansion of research into genomics and phylogeography within the Caimaninae, with previously unrecognized population structure throughout the range of every recognized species of caiman.
- 4. As I commented in my last report following the meetings in Chetumal, progress has been slow and laborious in developing means of identification by external morphology and meristics within many crocodylian species groups.

Prepared by: Kent Vliet Date prepared: 8 March 2024