



CHELONIAN CONSERVATION NEWS

NEWSLETTER OF THE IUCN SSC TORTOISE AND FRESHWATER TURTLE SPECIALIST GROUP

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From the Chair...

Craig B. Stanford

My attempt at an annual specialist group newsletter last year was well-received, so here is an end-of-2024 summary of our past 12 months. With COVID in the rear view window, we are back at our field projects full strength, with many important new projects, publications and plans. In this year's edition, we will update you on the progress of the TFTSG, which has had a banner year, with 5 IUCN Red Listing workshops completed in the past 18 months. More on this below, along with newsworthy official business from the group, as well as the 2024 career highlights that many of you submitted.

This newsletter will be archived on the TFTSG website at www.iucn-tftsg.org/newsletters, along with the 2023 issue.

Red Listing Progress and Workshops

Anders G.J. Rhodin and Vivian P. Páez

This year we held two IUCN Red Listing workshops, continuing the work of the three Red Listing workshops we held in 2023 (see last year's Newsletter).

Ojai, California. In November, the TFTSG held a two-day IUCN Red Listing workshop in Ojai, California, at the Turtle Conservancy campus. Anders Rhodin, our co-Red List Coordinator, organized and led the workshop and was assisted by Vivian Páez, our official Red List Coordinator, and Peter Paul van Dijk, former Red List Coordinator, and Craig Stanford, TFTSG Chair. A total of 31 people participated (22 in person and 9 by zoom). We assessed 23 taxa of North American turtles, primarily U.S. endemics, but also a few with ranges extending into southern Canada and/or northern Mexico, as well as one Caribbean species. Many thanks to all involved.



Some of the TFTSG Red Listing Workshop participants held at the Turtle Conservancy, Ojai, California, November 2024. Partial participants (left to right): David Germano, Tom Akre, Craig Stanford, Simon Rouot, Turtle Conservancy staff (in rear), Peter Paul van Dijk (in front), Turtle Conservancy staff (in rear), Brian Bock, James Liu, Peter Lindeman, Patrick Moldowan, Anders Rhodin (in rear), Vivian Páez (middle), Kurt Buhlmann (front), Amber Pitt (in rear), Ethan Hollender (middle), Brad (Bones) Glorioso (front), Jerry Johnston (rear), Pearson McGovern (rear) Mandi Gordon (front), Samantha (Patrick Moldowan's partner), and Don Ashton. Other workshop participants not in photo: Ross Kiester and Nathanael Stanek (plus Bruce Bury, David Mifsud, Eric Munscher, Grover Brown, Jim Parham, Mike Jones, Liz Willey, Will Selman, and Byron Wilson who participated by zoom). Many thanks also to our host, Eric Goode.

Tucson, Arizona. Earlier in the year, at the annual TSA /TFTSG symposium in July, in Tucson, Arizona, we held a mini-Red Listing workshop devoted to assessing a few U.S. species and led by the same members of the TFTSG Red Listing leadership team listed above. About 21 participants presented and reviewed assessments covering 6 species. Thanks to all those who gave their time and energy to make this workshop happen: Anders Rhodin, Peter Paul van Dijk, Craig Stanford, Russ Mittermeier, Kurt Buhlmann, Tracey Tuberville, George Heinrich, Jordan Donini, Jim Godwin, Ivana Mali, Hunter Howell, Leyna Stemle, Grover Brown, Andrew Walde, Eric Munscher, Jerry Johnston, Chris Lechowicz, Rick Hudson, Steve Enders, Brad (Bones) Glorioso, and Jordan Gray.

The results of these five workshops over the past two years, once all assessments have been finalized and posted, will bring the total number of assessments the TFTSG has completed in the past three years to about 135 species. Of these, five have already been published on the IUCN Red List website: *Kinosternon vogti*, *Gopherus morafkai*, *Apalone spinifera*, *Rhinoclemmys diademata*, and *Sternotherus depressus*. Another approximately 85 species have been submitted as finalized assessments to the IUCN and are currently "in press" pending the release of the upcoming updates to the Red List website in 2025.

Next on the planning horizon for Red Listing turtle and tortoise workshops and focus are preliminary plans to hold a workshop in Madagascar to reassess those species (last done in 2008) and another workshop, likely in Senegal, to update sub-Saharan and Central African species (last done in 2013).

Turtle Conservation Awards

Anders G.J. Rhodin and Rick Hudson

Behler Award. The Behler Turtle Conservation Award (www.iucn-tftsg/behler/) is a major annual international award honoring excellence and outstanding contributions in the field of tortoise and freshwater turtle conservation and biology, and leadership in the international chelonian conservation and biology community. It is considered the “Nobel Prize” of turtle conservation and biology and is co-presented by the IUCN SSC Tortoise and Freshwater Turtle Specialist Group, Turtle Survival Alliance, Turtle Conservancy, and Turtle Conservation Fund, the four organizations most closely tied to the turtle conservation legacy of John Behler. Additional supporters of the award this year were Re:wild, Andrew Sabin Family Foundation, Surprise Spring Foundation, Chelonian Research Foundation, George Meyer, Brett Stearns, Judith Behler Howells, and Deborah Behler. The award is based on open community nominations and final selection by the large and diverse Behler / Pritchard Award Committee, co-chaired by Anders Rhodin and Rick Hudson, with vice-chairs Vivian Páez, Peter Paul van Dijk, and Andrew Walde.

Congratulations to **Jeff Lovich** who was honored with the 19th Behler Turtle Conservation Award at the 22nd Annual TSA / TFTSG Symposium on the Conservation of Tortoises and Freshwater Turtles in Tucson, Arizona in July.



Jeff Lovich is a Research Ecologist with the U.S. Geological Survey, Southwest Biological Science Center in Flagstaff, Arizona. Raised in Virginia, he attended George Mason University, where he met Carl Ernst and started studying turtles, earning an M.S. in biology with Carl as his major advisor. He then attended the University of Georgia for a Ph.D., where he was mentored by Whit Gibbons and Justin Congdon at Savannah River Ecology Laboratory, working on the causes and consequences of sexual size dimorphism in turtles. Subsequently, Jeff wrote two editions of books on turtles of the United States and Canada with Carl, and a recent book on turtles of the world with Whit. He has been publishing the results of research on the ecology and taxonomy of turtles and other wildlife for 40 years,

resulting in over 200 scientific publications and five books. Along the way he described and named four turtle taxa, including three in the US and one in Japan. Most of his research is in the Mojave and Sonoran deserts of California where he has worked for over 30 years. He is a Fulbright Scholar and an elected Fellow of the Linnean Society of London, the world's oldest active biological society. Jeff has been one of the editors of *Chelonian Conservation and*

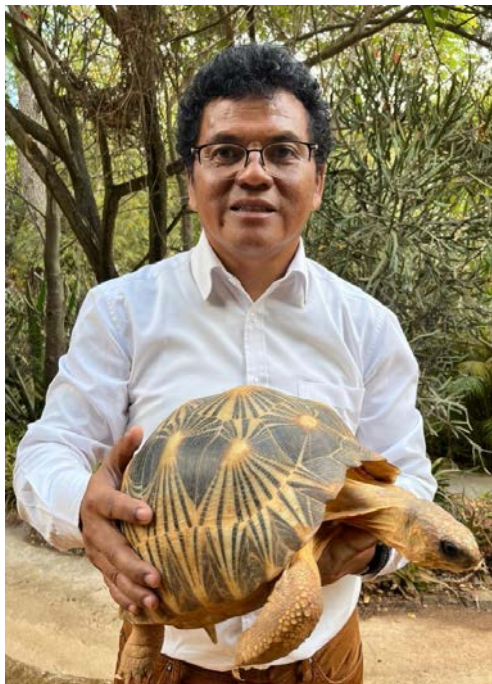
Biology for over 10 years. His continuing research focuses on all aspects of turtle ecology, and the impacts of utility-scale wind and solar energy development on wildlife, especially desert tortoises. Jeff is a well-respected member of our global chelonian conservation and biology community and highly deserving of the Behler Turtle Conservation Award, and we were pleased to finally honor him with this major award this year.

Pritchard Awards. The Pritchard Turtle Conservation Lifetime Achievement Awards (also at www.iucn-tftsg/behler/) generally honor somewhat older or retired later-career individuals who have made major and significant contributions to the turtle conservation and biology community. These awards are also based on open community nominations and final selection by the Behler / Pritchard Award Committee.

Congratulations to **Pat Koval**, **Herilala Randriamahazo**, **Elliott Jacobson**, and **Terry Graham** who were honored with the 19th–22nd Turtle Conservation Lifetime Achievement Awards at the 22nd Annual TSA / TFTSG Symposium on the Conservation of Tortoises and Freshwater Turtles in Tucson, Arizona in July.



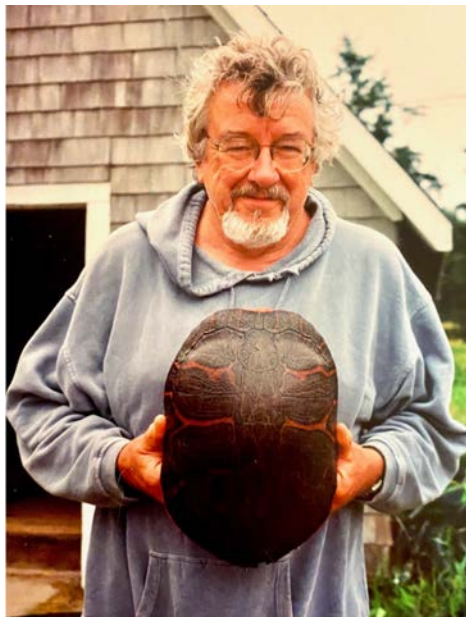
Pat Koval was honored for her key impact on the development, growth, and governance of the TSA, notably her instrumental support of the Turtle Survival Center, while also being a longterm active champion of global wildlife conservation efforts with other organizations.



Herilala Randriamahazo was honored for his longterm conservation efforts focused on Radiated Tortoises and heading up the TSA program in Madagascar.



Elliott Jacobson was honored for his outstanding herpetological veterinary expertise, research, and many reptile publications, notably on turtles and tortoises, and mentoring many herpetological veterinarians.



Terry Graham was honored for his longterm ecological studies on New England turtles, notably his early research and efforts to safeguard the Plymouth Red-bellied Turtle population in Massachusetts with an innovative headstarting program and promotion of its federal protection.

Other Turtle Conservation Awards

Craig B. Stanford

ISTS Lifetime Achievement Award. The International Sea Turtle Society (ISTS) Lifetime Achievement Award (<https://www.internationalseaturtlesociety.org/awards/past-award-recipients/>) is a major annual international award honoring excellence and outstanding contributions in the field of sea turtle conservation and biology.



Anders Rhodin was honored this year with an ISTS Lifetime Achievement award at the 42nd Annual Sea Turtle Symposium in Pattaya, Thailand. He was recognized for his groundbreaking work on bone and cartilage vascularity and growth in Leatherback Turtles, as well as for founding and providing support for many years for the Archie Carr Student Presentation Awards at the Annual Sea Turtle Symposium. Not many of us work on both freshwater turtles and sea turtles, and we congratulate him on this "cross-species" recognition. Anders joins a small group of people who have been honored with awards from both of these worlds, including our own past Behler Award winner, Peter Pritchard, and our past Pritchard Award winner, Earl Possardt.

Pilot release of Black Softshell Turtles (*Nilssonia nigricans*) in Assam, India

Shailendra Singh¹, Sushmita Kar¹, Khagesh Pegu², Jayaditya Purkayastha¹, and Rajib Baruah³

¹India Turtle Conservation Program, Lucknow, Uttar Pradesh, India

²Kaziranga Tiger Reserve, Bokakhat, Assam, India

³Nagshankar Temple, Biswanath, Assam, India

The India Turtle Conservation Program team, with support from Kaziranga Tiger Reserve, have yet again set a milestone for conservation of threatened freshwater turtles in northeast India. The Black Softshell Turtle (*Nilssonia nigricans*) occurs in the Brahmaputra basin and is considered by the IUCN Red List to be Critically Endangered. The team is in pursuit of replenishing its wild population through conservation breeding and supplementation. In April 2024, we protected 26 vulnerable nests of *N. nigricans* from Nagshankar temple, Biswanath district, which would otherwise have been depredated by mongoose and feral dogs. The eggs were incubated artificially and 260 eggs hatched in July. In December, after necessary health assessments, the team marked the pilot release of 314 hatchlings of *N. nigricans* from headstarted juveniles from this year and 2022 and 2023. Release sites in two discrete locations in Central and Western ranges of the Biswanath Wildlife Division along the Brahmaputra floodplain were selected after focused assessments for habitat suitability. The joint program has now released over 600 Black Softshell Turtles back to the wild since 2019.



More 2024 News from TFTSG members

Australia.

A few new publications from Deb Bower and her colleagues:

Deppe, A. R., Bower, D. S., & McKnight, D. T. (2024). Impact of severe drought on movement and survival of freshwater turtles in the Gwydir Wetlands, Australia. *Marine and Freshwater Research*, 75(7).

- Dowling, J. M., Bower, D. S., Boscarino-Gaetano, R., & Nordberg, E. J. (2024). The influence of fence design on the movement patterns of eastern long-necked turtles. *The Journal of Wildlife Management*, e22654.
- Dowling, J. M., Bower, D. S., & Nordberg, E. J. (2024). Ninja turtles: an experimental evaluation of potential anthropogenic barriers to movement for a freshwater turtle. *Journal of Zoology* (In Press)
- Van Dyke, J. U., Thompson, M. B., Bower, D. S., Santoro, A., Connell, M. J., McKnight, D. T., Clarke, S., Ortac, G., Cirocco, O., & Spencer, R.-J. (2024). 1 Million Turtles: empowering communities to save Australian freshwater turtles. *Australian Zoologist*. 43 (4): 588–598.

And in popular media:

Tracking the health of turtles in the Murray Darling. Published on July 30.

<https://www.youtube.com/watch?v=OY8tAtpNbxA>

International Insights to Save Aussie Turtles

<https://www.une.edu.au/connect/news/2024/07/deb-bower>

In 2025, an Australasian Freshwater Turtle conference will be held 16-17 June in Coffs Harbour, Australia. Subscribe to the mailing list at <https://1millionturtles.com/> for updates.

Cambodia.

In 2024, Angkor Centre for Conservation of Biodiversity (ACCB) a species conservation project of the Allwetterzoo Münster in Cambodia, collaborated with the Ministry of Environment, Rising Phoenix, and Wildlife Conservation Society to reintroduce 100 Elongated Tortoises (*Indotestudo elongata*) in a protected area in Cambodia.

Link to related paper by Willis et al:

[https://rupp.edu.kh/cjnh/journal/CJNH-2024-2/2024\(2\)-Willis-et-al.pdf](https://rupp.edu.kh/cjnh/journal/CJNH-2024-2/2024(2)-Willis-et-al.pdf)

Canada.

Jackie Litzgus' lab produced the following publications this year:

Mills, P.B., L.H. Friesen, and J.D. Litzgus. 2024. Under-ice behavior of Spotted Turtles (*Clemmys guttata*) late in the overwintering period. *Northeastern Naturalist* (special issue) 31(12): C27-C31.

Delay, S.J., S.B. Woods, and J.D. Litzgus. 2024. Spatial ecology of an urban population of Blanding's Turtles in Central Ontario, Canada. *Northeastern Naturalist* (special issue) 31(12): E85-E102.

China.

A new monograph from the Conservation Biology of Freshwater Turtles and Tortoises series: Blanck, T., Iverson, J.B., Zhou, T., Meier, E., and McCord, W.P. 2024. *Cuora zhoui* Zhao in Zhao, Zhou, and Ye 1990 – Zhou's Box Turtle. *Chelonian Research Monographs* 5(18):127.1–16. <https://iucn-tftsg.org/cuora-zhoui-127/>

Shi Haitao's research group has a new website, check it out:

<https://chinaturtleconservation.hainnu.edu.cn/>

India.

From Arunima Singh, Shailendra Singh, and colleagues:

Chheda, S., Tandel, S., Singh, A., & Singh, S. (2024) Simple Brachial Venipuncture Technique in Large Softshell Turtles (*Nilssonina* spp.). *Journal of Herpetological Medicine and Surgery*, 34(3), 157-159, <https://doi.org/10.5818/JHMS-D-23-00029>

Pareek, P. S., Singh, S., & Dutta, S. (2024). Nesting crawls and associated behaviors of turtles in the genus *Batagur* along the Chambal River, India. *Reptiles & Amphibians*, 31(1), e21297. <https://doi.org/10.17161/randa.v31i1.21297>

Singh, S., Basu, D., Riedle, D., & Dutta, S. (2024). Temporal changes in freshwater turtle assemblage in Gomti River, North India. *Reptiles & Amphibians*, 31(1), e21566. <https://doi.org/10.17161/randa.v31i1.21566>

Singh, S., Tripathi, A., Horne, B.D., Pareek, S.P., Dutta, S., & Haislip, N. (2024). Conservation recovery of *Batagur kachuga* and *Batagur dhongoka* turtles in India: Development and operation of a head-starting facility. *The Herpetological Bulletin*, 167. <http://dx.doi.org/10.33256/hb167.1419>

Yomcha, Tajum & Variya, Mayur & Kar, Sushmita & Singh, Shailendra. (2024). Range extension of Impressed Tortoise *Manouria impressa* (Günther, 1882) in northeast India. *Radiata* 33 (4): 36-39.

Japan.

From Zach Bell and the Okinawa Kame Centre:

In 2000, Tsutomu Otani began a capture-mark-recapture study of *Geoemyda japonica* in northern Okinawa Island. In 2024, Aya Narukiyo of the Okinawa Kame Centre obtained government approval to join the study, with Dr. Zachary Bell conducting research under her permit. Together, Narukiyo and Bell have identified several larger habitats in Okinawa that support *G. japonica* populations and are working to establish these as new study sites to expand the research. Visit www.okinawa-kame.org to learn more about the Okinawa Kame Centre.

Malaysia.

From Pelf Nyok Chen:

The Turtle Conservation Society of Malaysia (TCS) collected the highest number of *Batagur affinis* eggs since the project was started—1,506 eggs. Of these, 1,176 hatchlings were produced. Hatching success was at 78.1%, also the highest since 2011.

TCS won the Star Golden Hearts Award that “recognises organisations and individuals who have selflessly contributed to the betterment of Malaysian society.”

Mark Auliya and Pelf published a short note on the carapace size of the Malaysian giant turtle, *Orlitia borneensis* (Testudines: Geoemydidae) in Peninsular Malaysia.

Mexico.

The Turtle Conservancy completed the acquisition of nearly 1,000 hectares in the Cuatro Ciénegas Valley in the state of Coahuila, to be used as a conservation area for the three endemic turtles there, including the Critically Endangered Coahuila Box Turtle (*Terrapene coahuila*).

Myanmar.

From Steve Platt and colleagues' long term work on *Batagur trivittata*:

Platt, Steven G., Win Ko Ko, Kalyar Platt, Tint Lwin, Swann Htet Naing Aung, Khin Myo Myo, Me Me Soe, Myo Min Win, Kyaw Thu Zaw Wint, Htun Thu, Shine Hsu Hsu Naing, Brian D. Horne, and Thomas R. Rainwater. 2024. Range-Wide Demographic Collapse and Extinction Dynamics of the Endemic Burmese Roofed Turtle, *Batagur trivittata*, in Myanmar. 2024. Chelonian Research Monographs No. 9, 26 pp. https://chelonian.org/wp-content/uploads/file/CRM9/Platt_CRM_9_Batagur_trivittata_2024.pdf

United States.

From John Iverson and colleagues:

Bronkowski, A.M., A.R. Hedrick, G.A. Kutz, K.G. Holden, B. Reinke and J.B. Iverson. (2023). Sex-specific innate immunity and ageing in long-lived freshwater turtles (*Kinosternon flavescens*: Kinosternidae). Immunity and Ageing, <https://doi.org/10.1186/s12979-023-00335-x>

Iverson, J.B. (2024). Estimating generation time in freshwater and terrestrial turtles. Herpetological Review 54(4): 546-549.

Iverson, J.B. (2024). Life history of the ornate box turtle (*Terrapene ornata*) in the Sandhills of western Nebraska. Northeastern Naturalist 31: T77-T117.

Two new monographs from the Conservation Biology of Freshwater Turtles and Tortoises series:

Lindeman, P.V. and Vogt, R.C. 2024. *Graptemys pseudogeographica* (Gray 1831) – False Map Turtle, Mississippi Map Turtle. Chelonian Research Monographs 5(18):124.1–19. <https://iucn-tftsg.org/graptemys-pseudogeographica-124/>

Hughes, D.F., Allender, M.C., Bernstein, N.P., Iverson, J.B., Kolthoff, C., Martin, B.T., Meshaka, W.E., Jr., and Reed, B.M. 2024. *Terrapene ornata* (Agassiz 1857) – Ornate Box Turtle, Plains Box Turtle, Western Box Turtle, Desert Box Turtle, Tortuga de Caja Ornamentada. Chelonian Research Monographs 5(18):126.1–40. <https://iucn-tftsg.org/terrapene-ornata-126/>

And from Tracy Tuberville's lab:

Buhlmann, K.A. et al. (2024). Survival and age at maturity in head-started wood turtles (*Glyptemys insculpta*) with implications for population recovery. Northeastern Naturalist 31 (Special issue 12): G138-G155.

Glass, M.S. et al. (2024). Survival and behavior of Mojave desert tortoises head-started with and without outdoor rearing. The Journal of Wildlife Management 2024; 88:e22562.

Rimple, R.J. et al. (2024). Successful post-translocation reproduction and genetic integration of eastern box turtles. Biological Conservation <https://doi.org/10.1016/j.biocon.2024.110796>

Tuberville, T.D. et al. (2024). Anatomy of a turtle confiscation: what to expect when you're not expecting and recommendations for improving outcomes. Chelonian Conservation and Biology 23 (2).

Vietnam.

From Pham Thong, Luca Luiselli and colleagues:

Pham, V.T. et al. 2024. First natural history observations of the Critically Endangered Wattle-necked softshell turtle *Palea steindachneri* in its native range. *The Herpetological Journal*. DOI: 10.33256/34.2.127129

Luiselli, L. et al. 2024. A threat analysis for the world's most threatened turtle (*Rafetus swinhoei*). *Journal for Nature Conservation*. DOI 10.1016/j.jnc.2024.126577

Eurasia and Global.

A new monograph from the Conservation Biology of Freshwater Turtles and Tortoises series:

Vamberger, M., Busack, S.D., Ayaz, D., Fritz, U., and Mazanaeva, L.F. 2024. *Mauremys caspica* (Gmelin 1774) – Caspian Turtle, Caspian Terrapin, West Asian Stripe-necked Terrapin.

Chelonian Research Monographs 5(18):125.1–15. <https://iucn-tftsg.org/mauremys-caspica-125/>

And a shameless plug for my new book:

Stanford, C.B. (2024). *The Turtle Crisis*. Published by the Turtle Conservancy.

Wishing all of you much success and health for 2025!

Craig Stanford