Myanmar supports a diverse and imperiled freshwater turtle and tortoise fauna with eight endemic species including the Burmese roofed terrapin (*Batagur trivittata*). Rampant egg collection, agricultural conversion of nesting beaches, nest destruction, and adult harvest led to population declines. Although presumed extinct by the 1970s, a very small (<20 adult turtles) remnant breeding population was rediscovered in the Upper Chindwin River. The species is Critically Endangered and regarded as one of the world’s Top 25 most endangered turtles. As part of a comprehensive plan to save the species, the Wildlife Conservation Society (WCS) and Turtle Survival Alliance (TSA) initiated both *ex- and in-situ* conservation programs and the population is now approximately 900. The *ex-situ* program is based at the Yadanaabon Zoo in Mandalay where a captive assurance colony was founded with eight adult turtles obtained from temple ponds, fishermen, or confiscations. Additional groups are housed at the Lawkanandar Wildlife Sanctuary and the Htamanthi Wildlife Sanctuary, and head-started hatchlings from the *in situ* nest protection program are raised at the Limpha Basecamp on the Upper Chindwin River. Although this species was saved from extinction, wild population restoration is the goal and releases of head-started turtles to augment the remnant wild population are underway. As part of this comprehensive species recovery program, there is an immediate need to assure released turtles are healthy, fit for survival in the wild, and do not pose a risk to wild turtle populations.

A team from TSA (led by Dr. Kalyar Platt) and WCS [led by Dr. Paul Calle and veterinary technician Brittany Motkowicz (Bronx Zoo), veterinary technician Angela Perry (Prospect Park Zoo), and Dr. Steve Platt (WCS Myanmar)] worked with Myanmar Forest Department representatives during the trip. The team traveled to the Yadanaabon Zoo and Lawkanandar Wildlife Sanctuary to conduct health assessments (physical examinations and biological sample collection) from 50 terrapins that were 9-11 years old. The goal was to assess both individual animal health and fitness and to characterize overall population level health.

The samples were processed, analyzed, and archived using portable mobile laboratory equipment brought for this purpose. Partial sample analysis was conducted in Myanmar, and samples are banked in Myanmar for export to the United States for reptile specific disease testing when permits are obtained. The samples will be tested for diseases that can cause significant illness and death in turtles.
This knowledge is of particular value as a benchmark to compare to the disease status of Burmese roofed terrapins from other locations if they are considered for incorporation into the captive colony, and to ensure that they are healthy release candidates and do not pose a risk to the wild population.

Blood hematology results performed in Myanmar demonstrated that the terrapins have lower than expected blood protein levels compared to those housed at Wildlife Reserves Singapore (WRS) who received their terrapins from these colonies in Myanmar and who graciously shared their information with us. The most likely explanation for the blood protein differences are differences in dietary protein. Suboptimal protein can delay growth, onset of sexual maturity, and fitness for release, so correction of these values by adjusting diets is critical and is underway, and values will be rechecked in the future. Export of samples to the US for completion of laboratory analyses at WCS’s Bronx Zoo-based Wildlife Health Center will provide additional information about the terrapins’ health and fitness and enhance our ability to care for them and manage the captive populations for breeding, head-starting, and release. Capacity building of the in-country staff is a priority for WCS and TSA, and staff training was performed throughout the trip.

ACKNOWLEDGEMENTS
We thank the Minister of the Ministry of Environmental Conservation and Forestry, Director General and Deputy Director General of the Planning and Statistics Department of the Ministry of Environmental Conservation and Forestry, Director General and Deputy Director General of the Forest Department and the Director of NWDC for granting us permission to conduct this work at the Yadanabon Zoo and Lawkanander Wildlife Sanctuary. We also thank Liaison officer Shwe Htay Aung and Administrator U Thein Min Aung from Zoological Garden, Yadanabon Zoo, Mandalay for their invaluable assistance. U Than Myint, U Saw Htun, and the Wildlife Conservation Society Myanmar Program staff and Turtle Survival Alliance staff were instrumental in organizing logistics, facilitating fieldwork, and insuring the success of our expedition. Internal funding from WCS was provided through the Zoological Health Program’s Special Opportunities Fund.