

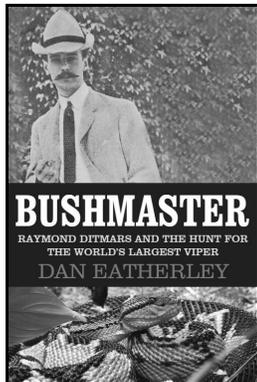
**Book Review: *Bushmaster: Raymond Ditmars and the Hunt for the World's Largest Viper*  
by Dan Eatherley. 2015. 303 pp.  
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Raymond Ditmars is an icon of North American herpetology. Ditmars was the first curator of reptiles at the Bronx Zoo, serving from 1899 until his death in 1942. More importantly, he was passionate about sharing his knowledge of and love for reptiles with the public through a series of books, lectures, and pioneering nature documentaries in the new medium of motion pictures. For those of us who grew up in pre-internet times, Ditmars' *Reptiles of the World* and *Snakes of the World*—while long out of date even then—often were the only books about herpetology in local libraries to feed the passions of the next generation of reptile-smitten students. Many herpetologists who followed in Ditmars' footsteps cite his books as instrumental in fostering their love of herpetology.

Of all the reptiles he worked with, Ditmars was perhaps most obsessed with the bushmaster, *Lachesis muta*. Of course today three additional species are recognized, *L. acrochorda*, *L. melanocephala* and *L. stenophrys*. Ditmars held a fascination for bushmasters ever since he received his first one in a shipment from Trinidad in 1896. He received a small number of them over his years at the zoo, but unfortunately they rarely survived very long due to rough handling during capture and heavy parasite loads. The arrival of a bushmaster at the zoo or Ditmars' departure on an adventure in search of them always was big news in local papers. Ditmars made many trips to the American tropics in search of bushmasters, but never saw one himself in the wild. The bushmaster was Ditmars' white whale. His passion for the species came across in his writings, which, along with his iconic photograph of the head of a bushmaster with open mouth, erect fangs, and slanted, malevolent eyes, sparked interest in the species among Ditmars' many fans and followers. I'm sure many of you remember that remarkable image. If not, you can see it in Eatherley's book.

Bushmasters remain the favorite and most sought after prize for many herpetologists, both professional and amateur. Bushmasters are the longest viper in the new world, reaching lengths of 2.5 m (8.25 ft) with a record length of 3.65 m (12 ft). They have peculiar bead- or file-like scales along their dorsum, and a spine-like scale on the tail tip. Bushmasters are the only New World vipers that lay eggs. They are scarce, secretive, and rarely encountered in the wild. When a lucky herper does find a bushmaster, it invariably becomes the highlight of his trip and the thing most bragged about. Even the well-known herpetologist



Harry Greene, in his seminal book *Snakes: The Evolution of Mystery in Nature*, devoted his introduction to the bushmaster. Greene reminisced about being in elementary school and reading Ditmars' adventure of unpacking that first feisty bushmaster from its shipping crate and struggling to transfer it to a cage in his family's home. Of all the many experiences in his varied career, Greene came back to Ditmars' inspiration and his own fulfillment of the quest to work with bushmasters as perhaps his greatest career highlight to illustrate the fascination of snakes.

Dan Eatherley's new book, *Bushmaster: Raymond Ditmars and the Hunt for the World's Largest Viper*, is more a biography of Ditmars than a study of the bushmaster. Eatherley began with a degree in zoology and employment with first the BBC and later an independent production company in the UK as assistant producer of nature documentaries. He produced two films for National Geographic starring Rom Whitaker: *Snake Hunter North America* and *Snake Hunter Costa Rica*. During the filming of the latter a bushmaster was briefly shown, and Eatherley was captivated. He began research on a proposed new documentary about bushmasters, which led him directly into Ditmars' remarkable life and career. Unfortunately, the events of 9/11 changed the focus of networks away from animal documentaries and his project was shelved, but Eatherley was caught in the same spell that so many other budding herpetologists had fallen for: the charisma of Ditmars.

Eatherley uses three tools to tell Ditmars' story. First, he employs historical fiction, in which he writes a scene from Ditmars' life like a novel, with detailed descriptions of locations, persons, and events, including dialogue. Each story is based on an actual event, but the novelization approach genuinely brings the story to life, allowing the reader to become immersed in the event and imagine what it might have been like to be there.

The second writing tool Eatherley uses is simple description of facts and events in Ditmars' life, as might be done in any biography. For instance, the original reptile house at the Bronx Zoo was the world's largest at 146 feet long and 100 feet wide, and construction cost was \$50,000, a considerable sum in 1899. Ditmar's initial salary as assistant reptile curator was \$75 per month plus \$10 room allowance. The reptile food bill for 1901 included "389 mice, 1,410 rats, 1,273 English sparrows, 366 rabbits, 531 pigeons, 232 chickens, 812 toads, 408 frogs, 26,900 live fish, 55 lbs. earthworms, 18,000 mealworms, 122 large pumpkins, 2,266 lbs green vegetables." But more than just data, Eatherley relates stories about the zoo and also Ditmars' travels. Because specialized veterinary care was unavailable, Ditmars was forced to do his own doctoring, relying on initiative, common sense, and a knowledge of normal behavior and anatomy. He kept a supply of medical equipment in his office, and medi-

cal procedures and outcomes usually were reported in the local newspapers. Ditmars knew the popularity of large and dangerous specimens and prioritized them, working with a network of dealers, collectors, and explorers to keep a constant supply of new arrivals. This often led to more adventures, such as the time two large king cobras escaped from their containers at the premises of a New York animal importer and Ditmars and an assistant had to rush over to capture them. Ditmars traveled to the countryside around New York City by means of railroad and horse cart, and later by motorcar, to collect local snakes. He once got in trouble in the press for carrying a 14-foot king cobra on a train from New York to the National Zoo in Washington, D.C., in his own berth to keep it warm. In spite of his claims of using an escape-proof container, it was felt he had placed the public in unnecessary danger. In later years Ditmars traveled extensively to Central and South America and the Caribbean to collect animals for the zoo. His departures and target species, as well as his returns and results, made popular headlines in both local papers and national magazines like *Time*.

Finally, Eatherley follows in Ditmars' footsteps himself, and, seeking the help of knowledgeable people, tries to experience some of the same activities that Ditmars pioneered and perfected. He hunts snakes in Central Park and some of the few remaining rattlesnake dens in New York and Connecticut. He visits Ditmar's house, which of course has a new owner unaware of its history, and also the reptile house of the Bronx Zoo. He interviews herpetologists currently doing the same work done by Ditmars. He visits the Cape Fear Serpentarium in Wilmington, North Carolina, which is run by Dean Ripa, the father of captive bushmasters. Ripa has the largest collection of bushmasters in the world and perhaps more experience with the genus than anyone. Ripa's specimens live long lives and breed regularly. I've had the privilege of a personal tour of Ripa's collection and it is most impressive, not to be missed.

Eatherley finally visits Trinidad where several of Ditmar's first bushmasters originated, shipped to him by R. R. Mole, a local collector, and where Ditmars himself visited in 1934 to procure animals for the zoo—specifically a bushmaster. This part of the narrative was of considerable interest to me because Eatherley's host in Trinidad was none other than the past editor of the *CHS Bulletin*, John Murphy, who is working on an update of his 1997 *Amphibians and Reptiles of Trinidad and Tobago*. I was one of several CHS members who joined Murphy in Trinidad in 1993 to gather specimens and photographs of the local herps for that book. We saw a wide variety of very interesting and exotic reptiles and amphibians there, but in spite of searching known haunts, the closest we came to seeing a bushmaster was a piece of dried skin on the wall of the Simla Research Station left there by its founder, William Beebe. Ditmars had a similar experience on Trinidad: he failed to find a bushmaster

himself but was given one collected by others. I'll leave it to you to read Eatherley's own experiences and adventures on the island.

Eatherley weaves the three writing styles together to good effect, moving from historical fiction to biographical narrative to personal experience and interviews and back again. The result is a story that is interesting, cohesive, and holds one's attention.

The book contains a number of black-and-white photographs of Ditmars, his colleagues, and his days at the Bronx Zoo. It is interesting to see the zoo animals from times when there were no restrictions on which species could be imported; Ditmars is shown with a Komodo dragon, unpacking a shipment containing a recently collected Galápagos tortoise, and with a "consignment" of Galápagos land iguanas. An image of the old Bronx Zoo reptile house is a stark contrast to modern zoo reptile houses. Additionally a number of contemporary color photographs depict Eatherley's travels and experiences doing research for the book.

Ditmars had a remarkable career. He recognized that people viewed reptiles in general and snakes in particular with both awe and revulsion, and thus strove to educate and identify positives about his favorite animals. To that end Ditmars was a master of promotion, both of herpetology and himself. He was a popular author of nature adventure books and much in demand as a lecturer. He was a master of generating news headlines in both local and national publications, concerning new animals and exhibits at the zoo as well as proposed travels and acquisitions. Even before his first significant motion picture was completed in 1914, he was described as "the father of cinematographic zoology." One of his many documentaries was titled *Evolution* and utilized a rhinoceros iguana with miniature backgrounds to depict a dinosaur. The film was re-released in 1925 to capitalize on the publicity of the Scopes "Monkey Trial" in which a high school teacher was prosecuted for teaching evolution in Tennessee. Ditmars also was deeply involved in the development of an effective treatment for snakebite in spite of never having been bitten himself. He collaborated with researchers in the United States, Brazil, and Panama who were working to develop an effective antivenin, and milked venomous snakes from the zoo to provide raw material for its production. Ditmars also publicized and condemned ineffective folk treatments for snakebite. In addition to serving as curator of reptiles, he was awarded a dual appointment as curator of mammals, and at the end of his career he initiated a public exhibit of invertebrates. Perhaps most importantly, he inspired generations of herpetologists who followed in his footsteps.

Bushmasters are perhaps as remarkable as members of the snake family as Ditmars is to the herpetology family. The two are forever linked, and their story is both interesting and entertaining. Eatherley does a good job of sharing that story and bringing it to life, and I recommend this book.

#### Literature Cited

Ditmars, R. L. 1931. *Snakes of the world*. New York: The MacMillan Company.

———. 1933. *Reptiles of the world*, revised edition. New York: The MacMillan Company.

Greene, H. W. 1997. *Snakes: The evolution of mystery in nature*. Berkeley, California: University of California Press.

Murphy, J. C. 1997. *Amphibians and reptiles of Trinidad and Tobago*. Malabar, Florida: Krieger Publishing Company.