

In memoriam: Dr. Frank H. Wadsworth, 1915–2022

Joseph M. Wunderle, Jr.*¹, Yaritza M. Bobonis-Vázquez², Dayamiris Candelario², Eleanor S. Devenish-Nelson³, Víctor M. Cuevas Padró⁴, Claus-Martin Eckelmann⁵, Derick G. Gil Hernández⁶, Marilyn Headley⁷, Carol James⁸, Howard P. Nelson⁹, Eliezer Nieves-Rodríguez², Orlando Rivera¹⁰, María M. Rivera Costa¹¹, Jean-Philippe Rochet¹², and Eugenio Santiago-Valentín¹³

Joseph M. Wunderle, Jr., Eleanor Devenish-Nelson, Howard P. Nelson:

The passing of Dr. Frank H. Wadsworth at the age of 106 on 5 January 2022, heralds the end of an era for tropical forestry in the Caribbean and Latin America. Although Frank is widely recognized for his pioneering contributions to tropical forestry, he also contributed to environmental education, nature appreciation, and wildlife conservation, thereby laying the foundation for many of the conservation efforts now underway in the Caribbean and beyond. Indeed, the Puerto Rican Parrot (*Amazona vittata*) would have gone extinct in the wild if not for Dr. Wadsworth's leadership.

Dr. Wadsworth arrived by boat to Puerto Rico in 1942 with limited knowledge of the island, but with a background in forestry that included field experience from Alaska to Arizona and a bachelor's degree, which facilitated his work as a forester with the USDA Forest Service. Frank also brought with him a keen enthusiasm for natural history and bird watching, which he developed as a youngster, bird watching around his hometown of Chicago, Illinois. Yet, coming of age in the years following the depression, it was forestry that offered better employment prospects for one drawn to nature.

After arriving in Puerto Rico, the Caribbean National Forest (now El Yunque National Forest) in the Luquillo Mountains of northeastern Puerto Rico was to become the focal point for much of his initial research, and the place where in 1943, he established several long-term forest plots for monitoring tree growth and survival. Those forest plots continue to yield insights relevant to tropical ecology and forest management today. Later in his career, he would contribute to the establishment of the Luquillo Experimental Forest (LEF), which together with his advocacy for long-term monitoring, remains a legacy that cannot be underappreciated. Indeed, this foresight continues to have a lasting impact on our understanding of Caribbean avifauna, with the LEF currently one of the most active sites in the region for ornithological research, yielding countless insights into food webs, competition, hurricane impacts, avian parasitism, and the population dynamics of the Puerto Rican Parrot, among many other species. The forests of the Luquillo Mountains were also



Frank H. Wadsworth in the 1960s in the El Yunque National Forest of eastern Puerto Rico. File photograph, International Institute of Tropical Forestry, USDA Forest Service, Rio Piedras, Puerto Rico.

to become the centerpiece of his 1949 doctoral degree in Forestry from the University of Michigan. As a research forester in the years that followed, he would author or co-author over 100 publications, including the now classic two-volume *The Trees of Puerto Rico and the Virgin Islands*. These contributions to tropical forest research in the Caribbean remain seminal to the field.

Dr. Wadsworth was not only a visionary forest researcher but also a skilled administrator, growing beyond his role as a forester for the USDA Forest Service to serve as Director of the Institute of Tropical Forestry (now International Institute of Tropical Forestry) and Supervisor of the Caribbean National Forest (now El Yunque National Forest). His administrative efforts ensured that the national forest lands were designated for research, watershed protection, and wildlife conservation. He also worked closely with the Puerto Rican government and played a key role in developing public policy that led to the island's Environmental Quality Board, its Forest Act, and the Department of Natural Resources.

Dr. Wadsworth was also a committed educator. By leading field courses (totaling 19 three-month-long courses) in Puerto Rico for 253 foreign forestry students from 15 countries, as well as by offering training courses elsewhere in the tropics, he played a pivotal role in building forestry and conservation capacity in

*Corresponding author: ¹Emeritus Scientist, International Institute of Tropical Forestry, USDA Forest Service, Sabana Field Research Station, Luquillo, PR, USA; e-mail: jmwunderle@gmail.com. Full list of author information is available at the end of the article.

Latin America and the Caribbean. He further contributed to the identity of Caribbean forestry by facilitating communications among Caribbean foresters for 22 years (1942–1964) as an editor for the *Caribbean Forester*, which provided an outlet for findings in research and management relevant to the region. After retirement from the Forest Service, he continued his research as a Forest Service volunteer and traveled globally to inspect diverse forest management efforts and to share his knowledge of tropical forests. Dr. Wadsworth summarized much of his knowledge along with a review of over 3,000 published articles on tropical forestry in his monumental volume *Forest Production for Tropical America*. Dr. Wadsworth is recognized by many throughout the tropics as the founding father of the practice of tropical forestry.

Dr. Wadsworth's life was dedicated to building local conservation capacity and stimulating appreciation of forests to ensure their sustainability. In his view, forestry was more than harvesting timber; it included managing forests to maintain their integrity and biodiversity. As supervisor of the Caribbean National Forest, he was one of the first to recognize the dire plight of the Puerto Rican Parrot in the late 1960s and early 1970s, which by then was only present in the national forest. His efforts convinced the Chief of the Forest Service to provide federal funds for biologists to undertake recovery actions for the species, which he consistently championed. As the founder of the Puerto Rican Natural History Society (PRNHS), he worked tirelessly to stimulate interest and appreciation of nature by leading field trips and promoting the society's activities, including public outreach, environmental education, and advocacy for conservation.

Dr. Wadsworth believed it was especially important to work with children and young adults to develop their interest and appreciation for natural history. When he realized that the Boy Scouts in Puerto Rico had a weak outdoor program, he volunteered his time to remedy that deficiency by leading the scouts in a variety of outdoor activities, including nature education. He fostered a scout nature team that focused on studying plants and animals in Puerto Rico and led the scouts on week-long expeditions to the island of Mona. The nature team provided opportunities for field experience, including monitoring an egret colony, measuring growth rates of trees, and reforestation techniques as applied to their scout camp at Guajataka, which he also helped develop. His authorship of booklets in Spanish for scout merit badges on topics including bird study, herpetology, botany, and conservation, as well as a book on the natural history of Mona Island, furthered his scout educational efforts. In his later years, he was instrumental in establishing the Santa Ana Environmental Center with an interpretive naturalist program dedicated to educating urban school children and the public in a forest reserve in the San Juan metropolitan area—one of the first such environmental education centers in the Caribbean.

Dr. Wadsworth never lost his interest in birds. He knew his birds and their natural history and generously shared his knowledge by routinely leading bird walks for the PRNHS, Boy Scouts, and others. He persuaded the first author to initiate and annually lead the Fajardo Christmas Bird Count in northeastern Puerto Rico, in cooperation with the PRNHS and other organizations. Not only did he participate in the early years of the count, but he and his wife, Isabela, were regularly the first participants to arrive in the pre-dawn hours to assist with the count of Múcaros

(Puerto Rican Owls, *Gymnasio nudipes*). Even in his 90s, he contributed to the count by finding and identifying bird species by song. His interest in birds led him to be an early member of the Society for Caribbean Ornithology (now BirdsCaribbean) and an avid reader of its newsletter, *El Pitirre* (now *Journal of Caribbean Ornithology*).

We are fortunate that Dr. Wadsworth marshaled his tremendous intellect, energy, discipline, and motivation to advance tropical forestry and conservation (reviewed in Steen 1998, Wadsworth 2014, Cerame-Vivas 2016). He was accessible and always ready to share his knowledge and appreciation of nature. His infectious enthusiasm and sense of humor always tempered his critical constructive comments. Thanks to his many contributions, most people in Puerto Rico, and many others throughout the tropics, recognize the importance of trees and their benefits. He has indelibly changed the face of conservation in Puerto Rico and the Caribbean and has helped make the developing tropics a greener place. May his many contributions serve as inspiration for conservationists in the Caribbean and beyond.

Yaritza M. Bobonis-Vázquez:

Dr. Frank H. Wadsworth was an extraordinary human being for all of us that met him. With his research, he contributed great knowledge about our natural resources and inspired thousands of Puerto Ricans to love nature. As an environmental scientist, I met Frank through his scientific contributions related to the study of Puerto Rican forests. Throughout his career, and in the various positions he held, he developed multiple forestry research projects and programs. For example, he contributed to the establishment of a recovery program for the endangered, endemic Puerto Rican Parrot, when the species was in a critical state at the end of the 1970s. Thanks to his studies and scientific collaborations, he emphasized the island's biodiversity as unique and unparalleled within tropical ecology. During my professional career as an environmental interpretive guide in El Yunque National Forest, I was amazed when I read his studies and learned of his forestry legacy. All his work and dedication inspired in me the popular thought that "you cannot value or love what you do not know." His knowledge and his multiple collaborations with other researchers complemented my learning about the history, ecology, ecosystems, and relevant species of the forest. Through his writings about El Yunque and its biodiversity, he offered us the basic information about El Yunque's natural resources so that we could transmit it to the hundreds of visitors from all over the world who made their stop in our rainforest and participated in our walking tours. Thanks to all the knowledge transmitted by Frank, this experience was rewarding and unforgettable.

After this wonderful experience in El Yunque National Forest, I became part of the team at the Santa Ana Nature Center (CASA), and that is when his contributions became more personal. I got to know Frank from another perspective, beyond the scientist, as an environmental manager and promoter of education and conservation of our natural resources. I understood through his actions that his greatest commitment to Puerto Rico was to provide opportunities for more children to learn about nature through experiences in a local forest. Thanks to the efforts of the Natural History Society of Puerto Rico, Frank's vision found

the perfect outlet in the Julio E. Monagas Park in Bayamón. The CASA Project, and its philosophy of providing outdoor experiences for children, was something he promoted in his later years of life. In our meetings, even at 103 years old, he always contributed his ideas about research and educational activities so that the Puerto Rican people had the opportunity to participate and learn about their biodiversity. Through the activities facilitated by CASA, such as the Symposium of the Forest, Endemic and Migratory Bird Festivals, projects such as More Children to the Forest and Olimpiadas del CASA, and the educators' workshops and interpretive walking tours through the forest, we will continue his legacy of educating Puerto Ricans about the importance of conservation.

I will always be grateful for the opportunities he provided, for having met him, and for having learned to foster a connection and love for nature by following his example. Frank will always be a great mentor and guide in my professional and personal life due to his passion for education and natural history. With all our hearts, we will be continuing to expose school children to our local forests, and we will continue to show all their benefits as he always wanted. To Frank, our infinite respect for his love and commitment to Puerto Rico and for inspiring us to protect what supports life: nature.

Dayamiris Candelario:

Despite reading many of his publications as part of my college studies to become an environmental scientist, I only met Frank personally around 2007, when I became an interpretive guide for a nature center in Puerto Rico that had been recently established by the Natural History Society of Puerto Rico. Little did I know that he was the main instigator behind the concerted effort of this nonprofit to establish the Centro Ambiental Santa Ana (CASA) in an urban forest in Bayamón, Puerto Rico. He had envisioned the creation of this project for more than 40 years, for kids to enjoy and learn about "all things nature." Aimed to provide experiences in forests for kids who were not scouts, and with the support of many individuals and organizations, CASA opened its doors in 2006 in the Julio Enrique Monagas National Park. More than 15 years of operation later, he helped nurture the creativity, inspiration, and sense of wonder and awe for birds, reptiles, bats, trees, rocks, etc. of our island to every kid we served, many of whom live in urban communities. His idea of providing these activities regardless of socioeconomic background impacted hundreds of schools, families, homeschoolers, community groups and universities, but also offered a rare job opportunity for young professionals like myself and seven other colleagues, to promote nature conservation in an outdoor setting. I credit him for having found myself in the right place, at the right time, because while working for CASA, I realized that working with children in the outdoors is my true calling. In many of our conversations, he thanked me numerous times for working on "his dream," to which I always replied "...thanks to your dream, I have this amazing job." For many children and their teachers, guided hikes with CASA would become their first experience in a local forest. Over 39,000 people, mostly children, have been impacted by the programs he facilitated, through thematic guided hikes, nature festivals, and workshops in the forest, and more than 30,000 people have been reached virtual-

ly to learn about Puerto Rico's nature. I always think that Frank's early experiences in a nearby forested area, and later as a scout in his home city of Chicago, shaped his destiny to become an essential figure promoting forest management, conservation, and education. The fact that Frank was frequently in nature from an early age confirms my belief that we all need to honor his legacy by promoting opportunities for more children to discover Puerto Rican nature.

Victor M. Cuevas Padró:

I first met this great wise man in the dawn light near the flagpoles of the Guajataka Scout Reservation where he called us in the early mornings, before sunrise, to show us constellations and planets before directing us on our bird identification walk to Isla de Garzas. This routine was part of every morning nature team patrol training. It is how many of us learned to identify birds by their song and visual characteristics, as we walked among the bushes of thorny Tintillos and Mameyuelos until reaching the shore of the lake in front of Garzas Island and a rookery of hundreds of Cattle Egrets (*Bubulcus ibis*). There, we met the Pied-billed Grebe (*Podilymbus podiceps*) and many other aquatic and shoreline species.

During our patrol's 60th anniversary celebration, he reminded us of the patrol's accomplishments and said he had estimated that we had completed around 3,000 of these early morning walks. Because the stars, planets, and the constellations were a very visible part of our mornings and nights in all the training sessions, Frank arranged for us to visit the Planetarium and Astronomical Observatory of the UPR Campus in Mayagüez.

Recognizing the need to train the members of this patrol in all aspects of Puerto Rico's rich biodiversity, Frank invited many experts to participate in these training sessions. This is how we met ornithologists, ecologists, herpetologists, botanists, and many other experts who sparked our interest in the study of the natural sciences and biology.

Because of this exceptional exposure to this interesting natural world, my academic life took direction. When the time came to start my university studies, I had already decided to study wildlife biology. It was through the Nature Team Patrol trainings that I learned about the recovery program for the Puerto Rican Parrot, and this stimulated my interest in working with these birds in El Yunque. Before finishing my bachelor's degree in biology, the opportunity arose to work with the Puerto Rican Parrot, so I moved to El Yunque and spent my first eight years of service living in the forest and working with the wild population of the Puerto Rican Parrot. Then, I continued to assist in different aspects of the development of the Forest Service's wildlife management program.

Frank always had something special and personal for each of us, and ever since we first met, Frank was always available to meet me in his office or respond by phone. He knew my interests and offered suggestions on how I might achieve success and satisfaction as a wildlife biologist. He never forgot that I once worked with the parrots, so whenever we talked, he would ask me about the status of the parrot recovery efforts.

We credit Frank for envisioning and creating the Nature Team Patrol, through which many of us learned first-hand to understand and love the natural resources of Puerto Rico. There, too,

he showed us the importance of sharing this knowledge with others, and the value of environmental education as a tool for conservation. I thank him for teaching us the punctuality that characterized his excursions and meetings with us and for the reminders he provided me in all our conversations.

Today, I am celebrating 38 years with the Forest Service in the El Yunque National Forest, where I have held many positions over the years. I remember with great honor and pride how I got to where I am today, because of the time I spent with the Boy Scouts at the Guajataka Camp and what we learned in the Nature Team. Thank you, Frank, for such a valuable time!

Claus-Martin Eckelmann:

When I think of Frank, I remember him as a traditional forester in its best sense. The sustainable production of wood was his point of departure, but he did not understand it as growing trees like corn. His mindset started with natural regeneration (where possible), the careful management of voluntary forest, and the kindling of valuable trees with economic potential. In all of this, he advocated for minimal interference with the natural succession of the forest ecosystem. He promoted and practiced what comes along in today's buzzwords, such as green economy, ecosystem management, and nature-based solutions. Although born three generations ago, mentally, he remained at the head of the game.

Derick G. Gil Hernández:

I met Dr. Frank Wadsworth in 2016 when he was already 101 years old while training to work as a nature interpreter for the Nature Team, a group that he founded in the Guajataka Scout Reservation around 1952. I was surprised at how good he looked for his age, but even more so by the clarity and enthusiasm with which he spoke to us about the woods, the camp, and the birds. During the time we shared, Frank told us about the great diversity of birds in the scout nature reserve, how they changed according to the ecosystem, providing tips for identifying them, and suggesting pedagogical methods to transmit that knowledge to the thousands of people who visit Guajataka every year.

Among his anecdotes, I remember how he described the change in the species of birds that he saw in the forest as the years passed. When Frank visited the Guajataka Scout Reservation for the first time, it was a vacant lot of an abandoned sugar mill, where all the forest had been cleared for agriculture. He dedicated many years to restoring the forest and, in turn, bringing back the birds. For me, it was amazing to learn that Dr. Wadsworth was able to see the success of his long-term efforts, as I don't think many people have had the opportunity to live long enough to see the complete reforestation of Guajataka. Another of his anecdotes that I remember was about his observations of the Pearly-eyed Thrasher (*Margarops fuscatus*), which in addition to chasing the campers who came too close to its nest, is also the first bird to sing in the morning and the last in the evening.

Frank managed to popularize bird watching among the young people who spent their nights in Guajataka, to the point that morning birdwatching walks became very popular, even though people had to wake up at 0430. Dr. Wadsworth kept visiting us every year during the training period to meet the new staff, and

he did so until he passed away at the age of 106. Today, we keep his old binoculars in the Nature Lodge Museum as a reminder of the great legacy of education, research, and conservation that he left throughout his dedicated life. Thank you, Frank; you are the source of inspiration for many generations that fight for the conservation of the environment, now and always.

Marilyn Headley:

I met Dr. Frank Wadsworth in the 1970s when I was a young forester doing forest research. In those days, I only called him Dr. Frank Wadsworth. My colleagues and I in Jamaica benefited a lot from receiving training in forest research and through collaborative forest research work with Puerto Rico. Because Puerto Rico is similar in size and structure to Jamaica, a lot of the forest research done by Dr. Wadsworth and his team was relevant to our conditions. The high volume of work that he produced over the years has always amazed me. I recall meeting him in the early 2000s at a forestry conference. Firstly, I was so surprised to see him and find out that he was still very active and going strong, as I was now an older forester. So anytime I interact with Ariel Lugo, or anybody from the International Institute of Tropical Forestry, I inquire about Frank. Frank's contribution to tropical forestry has been unmatched; the sector cannot begin to know how much his passing will be to us. He will be missed, he ran a good race, his contribution to the sector was tremendous. All I can say is well done, good and faithful forester.

Carol James:

Condolences to the entire forest management communities of the Americas on the passing of this luminary and legend, Frank Wadsworth. It was my privilege and pleasure to have met Frank over 40 years ago in Puerto Rico and to be influenced by his deep commitment towards learning all that he could about forests and their pivotal roles in sustaining planetary existence. This resonated with me as an ecologist and we shared rich conversations about forests and their role in maintaining the integrity of wildlife habitats, especially in my favorite eco-spot on the planet: the Asa Wright Nature Centre and Lodge. I am grateful that Frank shared his knowledge and expertise so generously with us in the Caribbean. May his rich legacy influence generations ahead.

Eliezer Nieves-Rodríguez:

One early morning around 0530 in 1987, my first Nature Team training began at Campamento Guajataka in Puerto Rico, and it was there that I met Frank for the first time. He was with his telescope, pointing it towards planets in the sky, and he greeted us with that first talk about astronomy, stars, and the wonders of the night sky. After that introduction, he led a bird walk, my first training exercise as a new member of the Nature Team. I became a proud member of a select group of young scout leaders of the camp staff that year.

During the summers I spent at Camp Guajataka, Frank invited local conservation professionals to continue our training on various topics, and it was those meetings especially that shaped my interest in nature education and bird watching. We had the opportunity to meet professionals such as Jaime Collazo, Barbara Cintrón, Ovidio Dávila, Edgardo González, Rafael Joglar, among

others. All these people were a great inspiration to generations of Nature Team members. Later, and thanks to Frank exposing me to these professionals, I became a geographer and furthered my education with graduate studies in geography and outdoor education. In addition, I became a NAI trainer for new environmental interpreters interested in job opportunities like the one I had at Camp Guajataka many years before.

Frank was a great inspiration to me, further engaging my interests in bird watching and education, to the point that he was always part of my tasks or activities in each agency or organization with which I worked. At the Conservation Trust of Puerto Rico, we adopted the Training Workshops of West Indian Whistling Duck and Wetland Conservation, created by BirdsCaribbean to promote the conservation of wetlands to teachers, as well as engaged in many local outreach efforts to promote the eBird Puerto Rico database for the first time. At the Department of Natural and Environmental Resources, we developed summer workshops for children and exposed them to bird watching, which for many was their first experience learning about their local birds. At the Department of Geography of the University of Puerto Rico, we conducted bird censuses with students on field trips for various courses on management and conservation. At the Santa Ana Nature Center (CASA), we designed the interpretive program for the nature center and planned and established the Endemic and Migratory Bird Festivals in collaboration with Environment for the Americas and BirdsCaribbean. At the San Juan Bay Estuary Program, we planned and coordinated the Christmas Bird Count for five years and now, in collaboration with the National Audubon Society, we will implement the Caribbean Waterbird Census using the BirdsCaribbean protocol, as part of the Caribbean Land Bird Monitoring Network.

I can attest that Frank's legacy goes beyond the study of forests and trees. His legacy is now embedded in the art of appreciating nature, in understanding nature to communicate it, and above all, in passing this responsibility to the younger generations of scouts and young people committed to remaining in Puerto Rico and making the good things we have even better.

To summarize, as I did for my fellow scouts in a memorial for Frank's passing, I stated: "And it was in the woods, at dawn, with his telescope pointing at the stars that I met him, and it was that moment that years later, you recognize that it was that one moment that changed your life for the better, not only because you could recognize birds by their song, to measure trees and do science, to identify the stars by name, to be able to give a talk to younger children or lead a whole troop on a night walk through the woods, but above all, to accept that through those actions, save the world if possible". Thank you, Frank, for that first bird walk; we will keep birding with a purpose.

Orlando Rivera:

I owe my passion for nature to Dr. Frank H. Wadsworth and the Nature Team at Guajataka Scout Camp! Dr. Wadsworth was the founder of the Nature Team. I met Dr. Frank Wadsworth when I was 15 years old (I am almost sixty now). For this underprivileged jibarito from the municipality of Manati, Dr. Wadsworth opened the world of nature, especially birds. How can I forget about the bird walks at five in the morning at Camp Guajataka? Rain or no rain, Dr. Frank Wadsworth was always willing to teach

the members of the Nature Team how to identify birds. He also taught us how to share our bird knowledge with the camping scouts. No matter where we were, we would go bird watching with Frank. It was a privilege to visit Mona Island, a state wildlife refuge, with Frank and the Nature Team. It was Frank who made the trip to Isla de Mona possible. He covered all the expenses for us. That is the Frank I remember, always helping underprivileged kids without asking for recognition. On the way to Mona Island, Frank would help us identify the seabirds we saw. Once we were on the island, it was mandatory to have a bird watching hike. Early in my career, I worked as a wildlife technician with two endangered bird species: the Puerto Rican Parrot at El Yunque National Forest and the Red-cockaded Woodpecker (*Dryobates borealis*) at the Apalachicola National Forest. I was a bird man because of Frank. Later in my career, I became an ecological restoration practitioner just like Frank. I continued walking in Frank's footsteps restoring ecosystems for which birds are a key component. At the end of the day of Frank's memorial service at Guajataka Scout Camp, I went on a bird hike to honor Frank. I have an inscribed copy of Frank's book *Trees of Puerto Rico*, which he signed: "To my disciple Orlando." What a great honor to be a disciple of Dr. Frank H. Wadsworth! Vaya con Dios Frank!

María M. Rivera Costa:

Desde siempre le admire, aun cuando no le conocía. En el Año 1976 sabía que era un scout que había dado mucho de su tiempo a educar a los jóvenes en el Campamento Guajataka en San Sebastián, donde viví la experiencia de ser Explorer Tropa 281 y aun no le conocía. En el 1985 mi hermana Explorer Tropa 281 había ido a Isla de Mona y él estaba allí para dar de su sabiduría a todos esos jóvenes que se aventuraron en el aprendizaje hacia la naturaleza.

Para el año 1991 llegue al Servicio Forestal en Río Piedras y él trabajaba allí. Fue un gran honor poder trabajar con él. Si, fui su voluntaria por varios años todos los viernes (mi día libre). Esos años fueron las horas más fructuosas en mi vida profesional. Cuando trabajábamos me sentía que el análisis que hacíamos era único, sin precedentes y así fue. Me lleno de confianza, hablábamos de mis estudios, del trabajo que realizaba, de mis logros, de la familia y al final fuimos muy buenos amigos. Un día llegué del campo, me vio y me dijo "botas sucias" y le mostré que estaban bastante limpias. Con los años cuando regresaba del campo y era su hora de salida y yo orgullosa llegaba con mis botas sucias el miraba mis botas sucias y sonreía. Hoy guardo un cuento que me hizo por mis botas sucias, mi más preciado regalo.

Desde siempre le admiré, supe quién era con la luz del día y hoy evoco con orgullo el honor de haberle conocido. Me siento honrada; saber y ver que como yo, muchos somos los que le damos las gracias por su legado, compromiso, dedicación en la ciencia, el respeto hacia la naturaleza y el cariño que siempre nos brindó incondicionalmente.

Dr. Frank H. Wadsworth, mis botas permanecerán sucias y sé que cada día en el bosque, cuando la brisa toque mi piel, cuando el sol aplaque mi frio, cuando el canto de un ave me alegre con sus trinos, cuando la sombra mitigue mi cansancio, cuando su árbol florezca y nuestros corazones palpiten le seguiré admirando por siempre.

Jean-Philippe Rochet:

I first met Dr. Wadsworth when I was 14 years old, during our training to become part of the Nature Team at Camp Guajataka, back in 1971. We, as a group, had the unique opportunity to learn from this great biologist, forester, and bird-lover, who came to Puerto Rico and fell in love with this tiny island in the middle of a big ocean, far away from his hometown in the States. He knew then that the only way to preserve our diverse ecosystems was by teaching the new generations, like us at the time, and by having us teach the ones coming after us. And sure did he!

Even though Frank was formally a forester, he knew the tight relations between trees and birds. Every time we started a walk around camp, Mona Island, or any other place in Puerto Rico we had the opportunity to visit with him, Frank identified and show-cased the birds and how important they were for the ecosystem. I always remember, at the beginning of every summer camping season in Guajataka, we would go with him at five in the morning to La Isla de Garzas (The Island of Cattle Egrets) at the shore of the Camp's lake to make a survey of the egret population. It was a great experience, especially for me, being from San Juan.

The great memories I have of Frank include how passionate he was about the things he knew and the relaxed way in which he explained all those things to us. He was always soft-spoken and detailed in a way only Frank could be. I will miss him, we all will miss him, but no one will forget him. Puerto Rico must be very grateful for having this adopted son living for so many years on this land, his beloved Puerto Rico.

Eugenio Santiago-Valentín:

El 2022, año de la partida física de Frank Wadsworth, tuvo un significado especial para mí porque además marcaba los 40 años desde la primera vez que lo conocí, a principios de 1982. Entonces yo tenía 15 años y era un estudiante de escuela intermedia. Fui uno de los candidatos seleccionados para formar parte del "staff" del Campamento Guajataka de Niños Escuchas. Allí Frank creó la Patrulla de Naturaleza, un grupo de jóvenes encargados de experiencias educativas sobre aves y otros aspectos de la naturaleza, que se ofrecían a los niños escuchas que acampaban durante los meses de verano. Antes del verano, Frank Wadsworth organizaba varios adiestramientos de fin de semana para preparar a los jóvenes de la patrulla, donde invitaba a científicos de diferentes ramas de las ciencias de la vida -ecología, botánica, entomología, manejo de vida silvestre, etc. Frank tenía a su cargo impartir charlas y caminatas sobre algunos temas, como la dasonomía, la astronomía (incluido una visita al planetario de la Universidad de Puerto Rico en Mayagüez), y la observación de aves. Estos adiestramientos organizados por Frank Wadsworth me abrieron los ojos a varias posibilidades de carreras profesionales, lo que logré al proseguir estudios universitarios en biología.

Gracias a Frank tuve mi primer taller de ornitología. Aprendí a manejar los binoculares y el telescopio terrestre ("spotting scope"), lo que me permitió mi primer encuentro con muchas especies de la avifauna de Puerto Rico y el Caribe. La experiencia me animó a seguir leyendo y conociendo sobre las aves. Esta experiencia personal ejemplifica cómo Frank Wadsworth fue el

responsable de brindarle a muchos jóvenes la oportunidad de aprender a desplazarse con los sentidos afinados, para escuchar y observar con detenimiento las aves y los demás elementos del entorno natural. Frank Wadsworth 1. creía en la educación ambiental como herramienta para avanzar la conservación de las aves, 2. entendía que la juventud era un segmento de la población fundamental para lograr la agenda de conservación de la avifauna y sus hábitats, y del ambiente en general. 3. Creía en las experiencias de inmersión, como una herramienta efectiva para la capacitación y la toma de conciencia de los jóvenes, como lo demuestran los adiestramientos en el Campamento Guajataka. Considero que Frank Wadsworth era especial por el optimismo y la pasión que proyectaba, tanto en sus iniciativas como en sus conversaciones. También tenía un empuje admirable: luego de un intenso día de conferencias y caminatas forestales por el Campamento Guajataka, nos guiaba a explorar las constelaciones y los planetas durante la noche; al otro día de madrugada, era el primero de pie, listo con los binoculares y el telescopio, para comenzar una caminata de observación de aves.

Author Information

¹Emeritus Scientist, International Institute of Tropical Forestry, USDA Forest Service, Sabana Field Research Station, Luquillo, PR, USA; e-mail: jmwunderle@gmail.com; ²Environmental Educator, Centro Ambiental Santa Ana, Universidad Interamericana de Puerto Rico, San Juan, PR, USA; ³Department of Biomedical Sciences, University of Edinburgh, Edinburgh, UK; ⁴Park Ranger, El Yunque National Forest, USDA Forest Service, Rio Grande, PR, USA; ⁵Regional Forestry Officer for the Caribbean, FAO, Suriname; ⁶Nature Team, Guajataka Scout Camp and Department of Biology, University of Puerto Rico, Mayagüez, PR, USA; ⁷Retired CEO and Conservator of Forests, Forestry Department, Kingston, Jamaica; ⁸Retired UNDP Environment and Sustainable Development Policy Advisor and Honorary Lifetime Board Member, Asa Wright Nature Centre, Trinidad and Tobago; ⁹Fauna and Flora International, Cambridge, UK; ¹⁰Retired Bureau Chief, Mining and Mitigation, Florida Department of Environmental Protection, Tallahassee, FL, USA; ¹¹International Institute of Tropical Forestry, USDA Forest Service, Rio Piedras, PR, USA; ¹²President, Rochet Business Technologies, San Juan, PR, USA; ¹³Professor, Department of Biology & Herbarium of the Botanical Garden, University of Puerto Rico, Rio Piedras, PR, USA.

Literature Cited

- Cerame-Vivas, M. (ed.). 2016. 100 : el Dr. Frank H. Wadsworth alcanza su primer siglo de vida y amigos le saludan, le felicitan, y le agradecen sus innumerables gestiones realizadas por Puerto Rico. Publicaciones Puertorriqueñas, Hato Rey, Puerto Rico.
- Steen, H.K. 1998. Evolution of tropical forestry: Puerto Rico and beyond: an interview with Frank H. Wadsworth. International Forestry, USDA Forest Service FS-610, Washington D.C.
- Wadsworth, F.H. 2014. A forestry assignment to Puerto Rico: forestry memoirs of Frank Wadsworth. Impresos Emmanuelli Inc., San Juan, Puerto Rico.

Cite this article as:

Wunderle, J.M., Jr., Y.M. Bobonis-Vázquez, D. Candelario, E.S. Devenish-Nelson, V.M. Cuevas Padró, C.-M. Eckelmann, D.G. Gil Hernández, M. Headley, C. James, H.P. Nelson, E. Nieves-Rodríguez, O. Rivera, M.M. Rivera Costa, J.-P. Rochet, and E. Santiago-Valentín. 2022. In memoriam: Dr. Frank H. Wadsworth, 1915-2022. *Journal of Caribbean Ornithology* 35:52–58. <https://doi.org/10.55431/jco.2022.35.52-58>