

MOTE & BOY SCOUTS OF AMERICA EMBARK ON MARINE STEM PROJECT FOR CORAL RESEARCH & RESTORATION

February 19, 2018 Shelby Isaacson



The MOU formalized a partnership between Mote & BSA on a new Marine STEM Adventure Scout program.

Today, Feb. 19, Mote Marine Laboratory (Mote) and Boy Scouts of America, Florida National High Adventure Sea Base (BSA Sea Base), formalized a collaboration combining Mote's leadership in coral reef research and restoration with BSA's Marine STEM

Adventure program. This new initiative will enhance Mote's existing partnership with BSA while benefiting coral reefs and encouraging young people to excel as ocean stewards.

The partnership was celebrated with the signing of a memorandum of understanding (MOU) by Mote President & CEO Dr. Michael P. Crosby and BSA Sea Base General Manager Mike Johnson at Mote's Elizabeth Moore International Center for Coral Reef Research and Restoration (IC2R3) on Summerland Key. The MOU outlines the collaboration in STEM (science, technology, engineering and math) education initiatives, conservation and research, citizen science and public outreach on priority ocean topics: particularly coral reef restoration and research.

"Mote is delighted to collaborate with Boy Scouts of America to encourage and inspire our next generation of science and conservation leaders," Crosby said. "We have successfully partnered together over the last year in education, interactive training and application of coral restoration methods, and we are encouraged by the Boy Scouts' alacrity to explore and learn alongside our scientists."

Over the last year, Mote and BSA Sea Base conducted a pilot program where local Scouts were able to assist Mote scientists with coral restoration outplantings at Fort Zachary Taylor Historic State Park in Key West. This was part of a two-year project that involved planting more than 12,000 fragments of five coral species along a snorkel trail during summer 2016 and 2017. Most of the restored corals were rescued by National Oceanic Atmospheric Administration (NOAA), propagated by Mote scientists and outplanted in the same general area where they were initially found.

"We are proud and honored to partner with Mote Marine Laboratory to encourage Scouts and this upcoming generation of scientists and stewards to take on one of the most challenging and important challenges facing our planet," noted Michael Surbaugh, Chief Scout Executive of the Boy Scouts of America. "At its core, Scouting teaches lessons in character and leadership in the best classroom granted to us – the outdoors, but also encourages good citizenship and community service. This partnership embodies the potential and power of those foundations as we apply them to the greatest challenges and opportunities facing future generations."

Mote scientists used their signature reef-building technique, microfragmentation and "re-skinning," to restore these reef-building corals. This method is based on observations that micro-fragmentation of brain, boulder and star coral produce fragments that can grow much quicker and fuse together in Mote's coral nursery. In the wild, these small fragments of essentially identical genetic twins are outplanted with the goal of "re-skinning" dead coral skeletons with new, living tissue.

Under the new MOU, Mote and BSA will explore information sharing between scientists and Scouts, with hands-on training of cutting-edge coral reef science and real-time data sharing.

Dr. David Vaughan, Executive Director of Mote's IC2R3 and Manager of Mote's Coral Restoration Program added, "This partnership is a proof of yet another practical way that

scientists and citizens, including young people, can work together to restore our reefs and help us scale up our efforts as we work toward the goal of planting one million corals. This partnership helps us spread the valuable message of conservation to like-minded restoration stewards.”

Mote scientists are working to restore 1,000 acres of coral reef in the Keys within the next 10 years — instead of the hundreds of years it would take for nature to grow these coral reefs. Using Mote Alfred Goldstein Institution for Climate Change Studies research infrastructure, partially funded by the National Science Foundation, Mote scientists are also working to identify a variety of genetic strains of corals that are more resilient and resistant to disease, warming ocean temperatures and ocean acidification — important traits for restoration success.

The new MOU is a framework that will allow Mote scientists and BSA to develop more specific plans for collaboration, with attention to:

- Development and delivery of research experiences and presentations for the BSA Marine STEM Adventure
- Public education and promotion of marine science and conservation to BSA
- Training and assistance with growing and planting of corals
- Sharing/exchange of facility use and research infrastructure specific to the coral restoration collaborations
- Cross-access to staff and students for training and application of coral restoration program based on availability and funding

BSA Sea Base is currently outfitting a 45-foot vessel to serve as a floating classroom and lab as part of the partnership. “Partnering with Mote Marine Laboratory is an amazing opportunity for our Scouts to gain access to world-changing, once-in-a-lifetime experiences that are happening right here in our backyard while adding incredible depth to our STEM program,” said Manager Mike Johnson.

As part of their MOU and continued relationship, Mote and BSA will work together on participation in the World Scout Jamboree in 2019, featuring a service and conservation message and potential global data collection effort regarding coral reefs around the world.

About the Boy Scouts of America

The Boy Scouts of America provides the nation’s foremost youth program of character development and values-based leadership training, which helps young people be “Prepared. For Life.®” The Scouting organization is composed of nearly 2.3 million youth members between the ages of 7 and 21 and approximately 960,000 volunteers in local councils throughout the United States and its territories. For more information on the Boy Scouts of America, please visit www.scouting.org.