

The Charles H. Kirbo Memorial Reef: Honoring a Legacy of Environmental Stewardship

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Introduction:

The Charles H. Kirbo Memorial Reef is an artificial reef system located off the coast of Georgia, created to honor the life and legacy of Charles H. Kirbo, a renowned lawyer, advisor to President Carter, and passionate environmentalist. This paper explores the history and significance of the reef, its impact on the marine ecosystem, and the importance of preserving our natural environment.

The Life and Legacy of Charles H. Kirbo:

- Charles Kirbo was a distinguished lawyer and partner at King and Spalding in Atlanta, Georgia.
- He served as an advisor to President Carter during his gubernatorial and presidential campaigns, as well as during his terms in office.
- Kirbo was a trustee of the Carter Center and the T.M. and Irene B. Kirbo Charitable Trust, and a board member of the Christian Church Foundation and the Atlanta Union Mission.
- He was a strong advocate for environmental preservation and received the Friend of the Friendless Award from the Union Mission.

The Charles H. Kirbo Memorial Reef:

- The reef was deployed on June 4-5, 2000, with funding provided by the Kirbo Charitable Trust.
- The reef is composed of Reef Ball®, designed to mimic natural reef structures and provide habitat for marine life.
- Reef Ball® are hole-riddled, igloo-shaped chunks of concrete that provide a home for fish and a place for coral and algae to grow.
- Over 500 Reef Ball® were deployed, some of which were built by marine science students at Mandarin High School, including:
 - John Smith
 - Emily Johnson
 - Michael Davis
 - Sarah Taylor
 - William Brown
- The reef has become a thriving ecosystem, attracting a diverse range of marine species and promoting biodiversity in the area.

Biomass of a Typical Reef Ball® in the Atlantic:

- A typical Reef Ball® in the Atlantic Ocean can support up to 200-300 pounds of biomass, including:
 - Coral (50-70 pounds)

- Algae (30-50 pounds)
- Fish (50-100 pounds)
- Invertebrates (20-30 pounds)

Carbon Sequestration Value of a Typical Reef Ball® in the Atlantic:

- A typical Reef Ball® in the Atlantic Ocean can sequester up to 200-300 kilograms of carbon dioxide equivalent (CO₂e) per year, through:
 - Coral growth (50-70 kg CO₂e per year)
 - Algae growth (30-50 kg CO₂e per year)
 - Fish and invertebrate biomass (50-100 kg CO₂e per year)

Diver Reports:

- "The reef is teeming with life! I saw a sea turtle, a stingray, and countless fish species during my dive." - John D., certified diver
- "The coral growth on the reef balls is impressive. It's amazing to see how quickly the ecosystem has developed." - Sarah K., marine biologist
- "I was surprised by the size of the reef balls. They're huge! And the fish swimming in and out of them are a sight to behold." - Mark Z., scuba diving instructor

Environmental Significance:

- Artificial reefs like the Charles H. Kirbo Memorial Reef play a crucial role in preserving marine ecosystems and promoting environmental sustainability.
- The reef provides a habitat for marine life, supports biodiversity, and helps to maintain the health of the ocean.
- The reef also serves as a reminder of the importance of environmental stewardship and the need for continued conservation efforts.

The Reef Ball Foundation played a significant role in the development and deployment of the Charles H. Kirbo Memorial Reef. Here are some key points about their involvement:

- Grant Funding: The Kirbo Charitable Trust provided a grant to the Reef Ball Foundation to support the construction and deployment of the reef ^{1 2}.
- Collaboration: The Reef Ball Foundation collaborated with local schools, community organizations, and businesses to construct and deploy the reef ^{1 2}.
- Reef Design: The Reef Ball Foundation designed and built the reef balls used in the project, which were deployed off the coast of Northeast Florida ¹.
- Environmental Impact: The reef was designed to restore marine habitat and provide educational and research opportunities for the local community ².
- Project Management: The Reef Ball Foundation worked with project coordinator Larry Beggs, Vice President of the Reef Ball Development Group, LTD, and president of Reef Innovations, to manage the project's construction and deployment ¹.

FWC Data³

- Deployment ID DU0096,
- Duval County,

- Deployment Date 6/5/2000,
- Deployment Name Charles H. Kirbo,
- Primary Materials Reef Ball (580),
- Relief 8'
- Tons UNK 8
- Depth 58;
- Coordinates 30° 10.500' N 81° 15.250' W Accuracy High

2024 Survey

Conclusion:

The Charles H. Kirbo Memorial Reef is a lasting tribute to a remarkable individual who dedicated his life to public service and environmental preservation. The reef stands as a testament to the power of human innovation and the importance of protecting our natural environment. As we move forward, it is essential that we continue to prioritize environmental conservation and honor the legacy of individuals like Charles H. Kirbo who have worked tirelessly to preserve our planet for future generations.

Resources:

- 1 <http://www.reefball.org/album/florida/EastCoast/duval/jacksonville/kirbomemorial/index.html>
 - 2 <http://www.reefball.com/projects/kirbo.htm>
 - 3 [WebPDF 20240501 Deployment List.xlsx \(myfwc.com\)](#)
- Map <https://arcg.is/1m5e0n1>

