
**FY2018 SECDEF ENVIRONMENTAL AWARD NOMINATION NARRATIVE,
NATURAL RESOURCES CONSERVATION – SMALL INSTALLATION
MARINE CORPS SUPPORT FACILITY BLOUNT ISLAND, JACKSONVILLE,
FLORIDA**

INTRODUCTION

Mission. Marine Corps Support Facility Blount Island (MCSF-BI) plans, coordinates, and executes facility maintenance, construction, environmental management, safety, communications/network services, and physical security efforts in support of Blount Island Command’s (BICmd) logistics mission of managing/executing the Marine Corps Prepositioning Programs. As the primary tenant BICmd provides Prepositioning and operational logistics support to United States Marine Corps (USMC) and Department of Defense (DoD) forces to enable them to rapidly and successfully conduct and quickly recover from assigned missions across the full spectrum of expeditionary warfare and anti-terrorist operations.

Population. MCSF-BI has a population of approximately 120 Marines and Sailors, plus 180 DoD civilian employees, that oversee more than 700 contractor personnel at the installation. The installation houses several tenant organizations, including the Military Sealift Command and Naval Cargo Handling Battalion 11 (Naval Reserve), as well as the Aviation Ground Support Equipment, Marine Corps Maintenance Contractor, and Regional Base Operating Support (RBOS) contract organizations.



Typical ship loading activities at MCSF-BI



Aerial view of the installation (main base and the DDA on the east side of the St. Johns River)

Environmental Setting. MCSF-BI lies in the middle of the St. Johns River in Jacksonville, Florida, and covers 911.2 acres on the eastern half of Blount Island. An additional separate 325.8-acre dredge disposal area (DDA) is part of the MCSF-BI property and lies east of MCSF-BI, on the east bank of the St. Johns River. These two areas contain approximately 3 miles of coastline.

MCSF-BI is located on an island that was created by placing dredge material from the Dames Point-Fulton Cut shipping channel onto four smaller islands and adjacent marshes after World War II. Land use at MCSF-BI consists of developed industrial land, undeveloped land, open water, and a dredge spoil area. Developed industrial land occupies 686 acres. The remaining 225.2 acres of the installation and 325.8 acres of the DDA provide natural resource values.

BACKGROUND

The Integrated Natural Resources Management Plan (INRMP) is the template for managing natural resources on MCSF-BI. The 2016-2021 INRMP underwent its 5-year update and was approved and signed in November 2016. In May 2016 and 2017, stakeholders, including the MCSF-BI senior command, U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), and private contractors, assessed the INRMP implementation for the previous year using DoD’s Natural Resources Conservation Metrics. Stakeholders also reviewed results of the MCSF-BI’s natural resource surveys, habitat

enhancements, environmental training programs, and proposed plans for future natural resource programs and activities.

The INRMP and corresponding natural resources programs are regularly reviewed both internally and externally. International Organization for Standardization (ISO) 14001 audits are conducted several times yearly by an external consultant to ensure compliance with requirements, including those for the natural resources program. MCSF-BI has no formal cooperative agreements or committees that influence the natural resources program, but the installation coordinates programs with state (FFWCC) and federal agencies (USFWS and National Oceanic and Atmospheric Administration [NOAA]) and with the Florida Natural Areas Inventory.

During the award period, the Natural Resources office was comprised of one staff member with primary responsibility for National Environmental Policy Act management, long-term planning, and maintaining the installation's INRMP, as well as regulatory interface, wildlife and land management, outdoor recreation, and resource enforcement. Additional support was supplied by private contractors.

SUMMARY OF ACCOMPLISHMENTS

MCSF-BI's approach to managing natural resources reflects the principles of ecosystem management, consistent with DoD and Marine Corps policy. The natural resource management approach on MCSF-BI is to develop, promote, and refine a comprehensive, ecosystem-based management program for resource conservation that provides maximum support of the military mission and infrastructure, while achieving sustainability of species and habitat diversity and compliance with all applicable laws and regulations.

Environmental Education

MCSF-BI is a small and highly developed installation with limited natural areas and native plant and animal communities. MCSF-BI recognizes that sound educational programs and training can profoundly influence a life-time conservation ethic in its employees, which can be transferred to future locations and responsibilities. During the FY2016 through FY2017 achievement period, MCSF-BI's Environmental Team cultivated a focus on environmental awareness and stewardship and their relationships to the core mission, while maintaining a broad-based program of environmental protection, resource surveys, monitoring, and habitat enhancement programs.

The INRMP defined the following goals for the Environmental Awareness Program:

1. Provide appropriate environmental instruction and information to MCSF-BI personnel.
2. Comply with all environmental training requirements.
3. Provide public awareness of DoD natural resource stewardship.

To achieve these goals, MCSF-BI developed and launched a comprehensive, multi-media program of environmental educational materials for base personnel. These included:

- **Videos** – Four short videos were created featuring seasonal changes at MCSF-BI. The videos highlight facts and photographs about plants and animals on base, identification cues, and safety information. The videos are shown in common rooms, waiting areas, and in orientation sessions for new employees.



Set up in common areas, the video series features plants and wildlife that base personnel and visitors may encounter at MCSF-BI.

- **Posters, Pop-up Banners, and Brochures** – A series of five laminated posters were

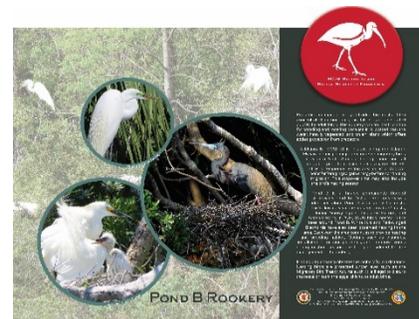


Nature Photos and Conservation Values are featured on posters placed in buildings around the installation.

developed for buildings throughout the installation. Each poster features photographs of wildlife found at MCSF-BI, while conveying information about environmental values and how they are expressed in the MCSF-BI natural resource management programs, such as conservation, sustainability, and biodiversity. The posters are displayed at high-visibility areas throughout the installation, and rotated for added interest and exposure. The posters will make compelling displays at functions to inform the public about DoD environmental management and stewardship programs. In addition to the posters, three free-standing pop-up banners were designed around themes of environmental management and sustainability. Two brochures focusing on protected species and native habitats at MCSF-BI were created to be given away at events or provided as “takeaways” in pockets on the pop-up banners.

- **Trail signs** – Five sturdy trail signs were constructed for installation along

trails or roads on base, giving base personnel a more nuanced appreciation of features they may otherwise overlook, and enhancing quality of life on the installation. One trail sign is designed to be placed near the wading bird rookery, a very active and special feature on base, and one that is highly unusual for an urban or industrial setting. Another sign discusses the history of Blount Island and its creation from dredge material from the St. Johns River, and the resulting susceptibility of the island to invasive plant species.



Five trail signs highlighting natural features are installed across the installation.

Internal Training. On August 23, 2017, 10 MCSF-BI employees completed a class in snake safety given by the Eastern Diamondback Conservation Foundation. Participants learned about the life history, toxinology, and ecology of native venomous reptiles; emergency field care for envenomation; and relocation and handling methods for snakes. MCSF-BI has a robust population of eastern diamondback rattlesnakes, making this training of high value to base operations through additional awareness and safety efforts.

In addition, grounds-keeping staff receive annual training on identifying invasive plant species and procedures for cleaning equipment after exposure to infested areas to avoid spreading the plants. Base personnel receive laminated cards with plant and wildlife species information, handling and management procedures, and contact numbers for support and additional information. These cards have proven to be particularly helpful to grounds-keeping staff who may encounter ground-nesting birds or snakes.

Newsletter Articles. As part of outreach within the DoD community, the MCSF-BI Environmental Team prepared and submitted three articles for publication in the USMC Conservation Program Newsletter. One article described the wading bird rookery on base; a second discussed the various reptile and amphibians identified during surveys; and a third dealt with the construction of what is now MCSF-BI from four islands in the St. Johns River. The articles were accepted, with the first published in September 2017.

Natural Resource Management

MCSF-BI differs from many other military installations because of its small size and largely industrial nature. Nevertheless, the area supports diverse bird populations as well as a wide variety of reptile and amphibian species. MCSF-BI strives to go above and beyond regulatory requirements to understand, monitor, and share knowledge about these valuable resources with scientists and the community at large in order to protect and preserve these species.

Wildlife management goals defined in the INRMP include maintaining existing habitat quality for migratory bird species and other wildlife, coordinating maintenance and construction activities to avoid disturbance in or adjacent to active nesting areas, and enhancing or improving roosting and nesting habitat in ways that would not constrain mission activities, such as constructing osprey nesting towers.

Bird Surveys. Located along the Atlantic Flyway, a principal migration route for migratory birds in eastern North America, MCSF-BI supports rich and varied bird populations, especially in the Dredge Material Management Area (DMMA). During periods of migration, transient species use MCSF-BI as a temporary resting area or as a stopover point for foraging to replenish energy reserves before continuing migration. Many of these migrating species will arrive and remain as winter residents or summer residents, and this time on Blount Island may include their breeding season; while many other bird species are found at MCSF-BI as year-round residents.



The Ruff has been observed several times during bird surveys since 2015. Its appearance at the DMMA was the first recorded observation in Duval County since the 1990s.

A total of 184 bird species have been observed at MCSF-BI since surveys began in 2009, including many rare or locally uncommon species, such as the Ruff, representing the first documented record of the species in Duval County. The American Golden Plover, observed in March 2017, is another rare bird species identified at MCSF-BI. Nine times a year, the installation conducts breeding bird, shorebird, and migratory bird surveys across MCSF-BI and the DMMA. All survey data are submitted to public birding sites, including e-Bird and the Florida Breeding Bird Atlas.

The bird survey data are integrated as a layer in the enterprise geographic information system (GIS). The bird dataset provides accurate geospatial data representing the locations of species on MCSF-BI and reporting capabilities. The locations of these bird species are important for base planners to plan for future development of MCSF-BI and avoid disturbing any species that might be considered endangered or threatened.

Rookery and Nesting Bird Protection. MCSF-BI has established procedures to protect nesting birds. Base personnel are trained in these procedures and they are strictly observed. Least terns are a state threatened species, and one of many species that return to nest on Blount Island and the DMMA. The base supports this protected species and other nesting birds by barricading the areas to prevent vehicular and pedestrian traffic, notifying base personnel to avoid nesting areas, and monitoring nesting activity. MCSF-BI also monitors nest construction on vehicles and equipment stored onsite and prohibits their use until after the young birds have fledged. By researching and implementing mitigation measures, MCSF-BI is working to improve the nesting habitat for the least tern species while protecting these birds from industrial operations by encouraging nesting away from areas necessary for mission use.

Over the past several years, a wading bird rookery has matured to support hundreds of nesting great and snowy egrets, as well as tri-colored and little blue herons. To protect this important resource, installation personnel keep the area in a natural state and avoid disturbing the area during nesting season.

All bird survey data are shared with regulatory agencies and with public birding sites, including Cornell's e-Bird, the Florida Shorebird Database, and the Florida Breeding Bird Access. Researchers, land managers, and scientists use this information to help conserve birds and their habitats. In addition, data-sharing has led to several community involvement opportunities with ornithologists and birding enthusiasts. Kevin Dailey, Chair of the Florida Ornithological Society, expressed his appreciation for MCSF-BI's efforts on 7 April 2017.

I wanted to express my sincere gratitude to you for hosting us on the Dayson Basin property this morning. I was joined by 14 current and former officers of St. Johns County Audubon, Duval County Audubon, the Florida Ornithological Society, and volunteers from Cornell's Lab of Ornithology, and we were able to conduct a four hour trip around the property tallying a remarkable 71 bird species.

Dayson Basin has proven to be an invaluable environmental resource for a wide variety of migrant, resident, and breeding bird species and is an especially critical stop-over for long distance migrant shorebirds and waterfowl. On behalf of the group, I would like to commend you and your organization for managing this property in such an excellent manner for so many years. I would also like to thank you for allowing us the extreme pleasure of being able to visit the facility.

I look forward to working with you to arrange future visits so we can continue to better understand the distribution and abundance of our avifauna.

Kevin E. Dailey

Chair, Florida Ornithological Society: Field Observations Committee

MCSF-BI Environmental Staff have also received Letters of Appreciation from the North American Bird Banding Program for their assistance in reporting banded birds.

Reptiles and Amphibian Surveys. Since 2015, MCSF-BI has conducted annual surveys for reptiles and amphibians, using silt fence arrays, funnel traps, and PVC pipes. A total of 25 herptile species (7 amphibian and 18 reptile species) were identified in surveys conducted between March and June 2017. Results of the surveys are used to guide and refine management practices for herptile species on the installation.



A scarlet snake photographed at MCSF-BI during a herpetological survey in 2016.

MCSF-BI adopted the following management practices for maintaining and enhancing reptile and amphibian populations on base:

- Remain vigilant for possible introductions or range expansions of all invasive exotic animals. Blount Island has a high potential for foreign animal species introductions given the amount of international shipping that occurs. Once detected, take necessary measures to eradicate recently established populations as early as possible.

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- Educate military and civilian personnel and grounds-keepers on the value of amphibians and reptiles to the ecosystem. Supply materials that help identify and inform the public regarding rare amphibian and reptile species (such as kiosks and pamphlets). Post and enforce wildlife collection laws.



A squirrel tree frog (left) and green tree frog (right) identified during survey in April 2017.

- Refrain from using fertilizers, herbicides, and pesticides. Amphibians have porous skins and most have an aquatic life stage, rendering them particularly vulnerable to toxins. If the use of chemicals is deemed necessary, strictly follow label instructions and be particularly cautious near aquatic environments.

Additional Surveys. Because MCSF-BI consists largely of created land, it is particularly susceptible to infestation by invasive exotic species. MCSF-BI conducts invasive exotic plant surveys on an annual basis and has in place invasive species control plans targeted for higher quality habitat areas. Alligator surveys are also conducted annually. While the most of the installation's gopher tortoise population was relocated to an appropriate recipient site, gopher tortoise surveys continue to be conducted biannually in suitable habitat areas.

Community Partnerships. MCSF-BI has many community partners, and continually seeks opportunities to partner with local and regional environment and conservation advocacy groups, such as the Audubon Society. Results of all resource surveys are reported annually to the Florida Natural Areas Inventory (FNAI) and included in the state Conservation Lands Database. The FNAI maintains a comprehensive database of the biological resources of Florida, and is the primary source for information on Florida's conservation lands.



Audubon Society members enjoy a day of birding at the DMMA in April 2017.

Although MCSF-BI is classified as a “closed” base with limited public access, on certain occasions, such as Earth Day, it welcomes local Boy Scout troops to camp on the installation and participate in a variety of activities. In 2016, Boy Scouts constructed bird boxes and bat houses for installation around the base. In April 2017, the troops constructed carpenter bee boxes, scattered native wildflower seed, and learned about the importance of native pollinators to our environment.

Boy Scouts also participate in the annual shoreline cleanup. During 24 to 28 April 2017, the groups filled forty 96-gallon trash bags, and one 20-cubic-yard rolloff (estimated 9,868 pounds) of wood, glass, plastic, and trash from the MCSF-BI shoreline. This cooperative program improves aesthetics for both base personnel and the community at large, including boaters and homeowners along the St. Johns River. Another benefit for base personnel and the community is the promotion of environmental stewardship and awareness of where trash and debris are deposited in the natural environment. Finally, removal of debris and potential contaminants from the shoreline improves the quality of the salt marsh ecological community.

MCSF-BI has made significant achievements in natural resource management, despite its largely industrial nature, and is a proud steward of the natural areas it occupies. Through its environmental accomplishments, MCSF-BI strives to encourage a conservation ethic that will extend far beyond the small island's borders.

**SECDEF / SECNAV FY2016-2017 Environmental Award Nomination
Natural Resources Conservation
Marine Corps Support Facility Blount Island, Jacksonville, Florida**

Photograph Captions for Awards Brochure

01_Aerial

MCSF-BI Aerial View: Aerial view of the installation highlighting (red lines) the main base and the Dayson Dredge Spoil Area (DDA). The DDA is on the east side of the St. Johns River.

02_Ship Loading.jpg

Typical ship loading activities at MCSF-BI: Loading of equipment on to a Maritime Prepositioning Ships (MPS) Program vessel.

03_Video Still Photos

Still Photos From 4-Part Video Series: Set up in common areas, the video series features plants and wildlife which base personnel and visitors may encounter at MCSF-BI.

04_Poster Series

One of 5-Part Poster Series: MCSF-BI Nature Photos and Conservation Values are featured on posters placed in buildings around the installation.

05_Trail Sign

Trail Sign Highlighting Wading Bird Rookery: Hundreds of great egrets, snowy egrets and heron nest at MCSF-BI during the spring-summer breeding season. Five trail signs highlighting natural features are installed across the installation.

06_Ruff

Ruff at DMMA. The Ruff has been observed several times during bird surveys since 2015. Its appearance at the DMMA was the first recorded observation in Duval County since the 1990s.

07_Scarlet Snake

Scarlet Snake at MCSF-BI. A scarlet snake photographed at MCSF-BI during a herpetological survey in 2016.

08_Tree Frogs

Tree Frogs at MCSF-BI. A squirrel tree frog (left) and green tree frog (right) identified during survey in April 2017.

09_Audubon Society

Audubon Society Members at DMMA: Audubon Society members enjoy a day of birding at the DMMA in April 2017.