



2021 SECRETARY OF THE ARMY

ENVIRONMENTAL AWARDS



Fort Stewart/Hunter Army Airfield Natural Resources Conservation - Large Installation

BACKGROUND & INTRODUCTION

Fort Stewart/Hunter Army Airfield (FS/HAAF) is the largest Army installation east of the Mississippi River and serves as home to the 3rd Infantry Division. FS/HAAF's mission is to provide a safe, secure, and responsive community that enhances the installation's power projection platform in support of national security objectives.

The natural resources (NR) staff manages 139,700 acres of pine forest; 74,000 acres of forested wetlands; 9,600 acres of hardwood management areas (HMAs); and 58,300 acres of forest openings. FS/HAAF is also home to the largest remaining tract of the longleaf pine-wiregrass ecosystem in Georgia. The longleaf pine ecosystem, blackwater rivers, ephemeral wetlands, HMAs, and wildlife openings provide training lands for Soldiers and habitat for seven species protected by the Endangered Species Act, and over 20 species of concern.

The natural resources team is composed of representatives from the Environmental Division; Forestry Branch, Fish and Wildlife (F&WL) Branch, Cultural Resources Management and Wetlands programs, and the Directorate of Plans, Training, Mobilization, and Security (DPTMS) Integrated Training Area Management program representatives.

To achieve Integrated Natural Resources Management Plan (INRMP) goals, this cross-functional team developed detailed Integrated Management Prescriptions (IMPs) for each of the installation's 120 training areas, including habitat restoration, threatened/endangered species (TES), forestry, cultural resource sites and surveys, borrow pits, wetlands, and current and future training facilities. The IMP Team structure allowed for inclusive decision making and helped build respectful relationships among the members.

PROGRAM
MANAGEMENTORIENTATION
TO MISSIONIMPACT &
OUTCOMESTECHNICAL
MERITSTAKEHOLDER
INTERACTION

TRANSFERABILITY



ACCOMPLISHMENTS

FS/HAAF has established a tradition of successful NR management due to its consistent, innovative and proactive approach to problem solving. Through the integrated management strategies developed in the INRMP, NR managers have formulated a masterful balance between military training needs and environmental sustainability. As a result, the success of the installation's environmental efforts were a major contributor to FS/HAAF winning the Army Communities of Excellence Awards in 2004, 2005, 2006, 2009, 2012, 2015, and 2019.

The goal of the INRMP is to ensure zero net loss of the installation's ability to support current and future military missions. It stresses the use of ecosystem management principles (managing on a large scale, incorporating natural disturbance regimes such as fire, restoring and enhancing native species, controlling invasive species, etc.) to ensure the long-term sustainability of the installation's natural communities. Major areas of emphasis include enhancing the landscape's suitability for training by improving visibility and maneuverability, reducing regulatory constraints, and providing for the enjoyment and wise use of the installation's bountiful natural resources. During the award period, the installation sustained and advanced its accomplishments towards these goals. This success can be attributed to increasing maneuver area visibility, maneuverability, and training capability through prescribed burning and thinning of the forested ecosystems. This also allowed FS/HAAF to maintain a training environment that is free of regulatory constraints [i.e., no red-cockaded woodpecker (RCW) restrictions within maneuver areas].

The objectives of the INRMP are to manage the landscape to support military training, enhance ecosystem integrity, restore longleaf pine ecosystems and ensure compliance with the Endangered Species Act. During the award period, FS/HAAF had great success in meeting these objectives. With zero

training days lost due to wildfires and no training restrictions for RCWs, the installation is able to claim 100 percent success regarding landscape management to support military training. Furthermore, maneuverability and visibility on the landscape continue to improve substantially as more areas are thinned and maintained by prescribed fires to reduce woody vegetation encroachment.



Intensive population monitoring and proactive habitat management has made it possible for the installation to remove military maneuver restrictions from red-cockaded woodpecker clusters in consultation with the U.S. Fish and Wildlife Service.

Though difficult to put a numeric value on FS/HAAF's success in enhancing ecosystem integrity; timber thinning, prescribed burning and restoration of the longleaf pine/wiregrass ecosystem have certainly had a positive effect. Success is perhaps best evidenced by the continued growth of the RCW population. Since exceeding its recovery goal in 2012, the installation has realized a 63 percent increase in its RCW population. With a total of 582 potential breeding groups, FS/HAAF has the second largest population in the world. With 438 acres of longleaf pine planted during the award period, FS/HAAF also saw tremendous success in restoring longleaf pine ecosystems. Finally, the installation was 100 percent compliant with the Endangered Species Act during the award period. The installation's efforts in timber thinning, prescribed burning and restoration of longleaf pine helped solidify FS/HAAF's ability to maintain compliance.



while simultaneously supporting and enhancing the military mission.

The following further summarize FS/HAAF's major accomplishments during the award period:

- 1. Ensuring the sustainability of FS/HAAF's training and conservation missions by protecting 17,003 additional acres under the Army Compatible Use Buffer (ACUB) Program from FY19-FY20. As a result, the installation increased the total acreage protected under ACUB to 94,597 acres. This success guarantees that FS/HAAF will continue to provide unrivaled training opportunities for both current and future generations of Soldiers.
- 2. Continuing the success of its red-cockaded woodpecker (RCW) management program, FS/HAAF realized a 63 percent increase in its RCW population since reaching recovery in 2012. With 582 potential breeding groups (PBGs), it is the second largest population in the world. In support, the natural resources team installed 509 artificial cavities from FY19-FY20.
- 3. Conducting prescribed burns on 231,570 acres from FY19-FY20 ensured a superior training environment while maintaining important habitat for TES. As a direct result of the number of acres burned annually and the burn quality, Soldiers have not lost one day of training due to wildfires or wildfire suppression since FY00.
- 4. Providing ample, well-maintained hunting and fishing areas bolstered participation in FS/HAAF's recreation program. With more than 148,713 visits in FY19 and FY20, this program allows customers to enjoy the environment while assisting with the management of fish and game populations on the installation.
- 5. Restoring the native longleaf pine/wiregrass ecosystem improved training landscapes and TES habitat. From FY19-FY20, FS/HAAF controlled midstory on 1,800 acres, collected 3,878 pounds of wiregrass seed, planted 134 acres of wiregrass, planted 438 acres of longleaf pine, and conducted

timber thinnings on 5,531 acres. These actions also improved habitat for the RCW, eastern indigo snake, and gopher tortoise.

- 6. Thinning 246 acres of timber IAW the Cantonment Area Wildfire Protection Plan on Fort Stewart mitigated potential loss by reducing hazardous fuels. Timber thinning and future prescribed management actions will serve as an effort to reduce the threat of wildfire related damages to people and property on and off the installation.



Prescribed burning provides the installation with benefits such as wildfire reduction, a superior military training platform, enhanced threatened/endangered species habitat, and improved forest ecosystem health.

Overall Natural Resources Management

FS/HAAF's NR management program prides itself on a unified team approach, outstanding working relationships with stakeholders and partnerships with other entities. NR managers coordinate with individuals directly responsible for military readiness (i.e., DPTMS) through participation in range design charrettes; development of IMPs; setting priorities for the installation's ACUB Program, prescribed burning, timber harvests, and erosion control; and reducing training restrictions associated with endangered species conservation. This holistic management approach allows FS/HAAF to effectively and proactively meet the challenges associated with ever-changing training needs and federal and state regulations, while enhancing the



sustainability of the installation's environment and mission.

The objectives of the NR program include managing the landscape to support military training, enhancing ecosystem integrity, restoring longleaf pine ecosystems, and ensuring compliance with the Endangered Species Act. NR staff coordinate closely with the DPTMS to ensure that the landscape meets the military trainer's needs. For example, woody vegetation in RCW habitat is controlled through the frequent use of prescribed fire, heavy-duty mowing, and when necessary, application of herbicides. Land managers look for opportunities to co-use military openings as wildlife openings, which increases suitability for training, reduces maintenance costs, improves wildlife habitat, and enhances recreational opportunities for area sportsmen.

Focusing on sustainability and searching for cost-effective tools to improve compliance practices has led not only to the development of new projects/programs, but also to the success of strategies currently being employed to reach these goals. In fact, the NR program's efforts will outlive current staff because:

- Restoration of the longleaf pine/wiregrass ecosystem creates a legacy for future managers;
- Mitigation credits from wetland banks will be available for many years;
- ACUB protection will prevent military training constraints arising from incompatible future development.

FS/HAAF partners with federal and state agencies, universities, research institutions, and non-governmental organizations to ensure that environmental activities are backed by the best science available. The NR team also shares its accomplishments with others through various outlets such as presentations at DA/DoD, professional and local conferences/workshops; participation on technical committees; visits to

other installations (at HQ request); and publication of papers in peer-reviewed journals. These efforts have resulted in FS/HAAF partnering with IMCOM's Wildland Fire Working Group, including Deputy Chief of Staff, G9 (formerly ACSIM) and other garrisons. FS/HAAF will also host several of the prescribed burn courses for both Army and Air Force personnel.

Mission Enhancement

The FS/HAAF NR program supports the military mission by emphasizing proactive management to achieve compliance; minimizing training restrictions; thinning timber; and prescribed burning to reduce wildfire risk and improve visibility and maneuverability. This strategy has produced numerous outcomes that support the program's win-win mindset. For instance, prescribed burning and timber thinning have created a "surplus" of RCWs, which in turn has allowed the installation to remove restrictions on training and offset impacts from new construction. Additionally, the Forestry Branch harvested and marked a 247-acre portion of the B3 Battle Area Improvement Project. Doing so improved maneuverability and line of sight for troops and reduced natural obstacles that limit platoon-sized armored units from maneuvering north to the B3 firing line. Forestry also conducted a prescribed burn in a portion of the project area in order to help reduce vegetation along the bluff on the observation points.

Another example would be FS/HAAF's highly successful ACUB program. Though the size of the Army may be shrinking, the constant need for new facilities to support modernized weapons systems and changing missions still remains. Through the purchase of development rights using conservation easements, the ACUB program aids in preventing encroachment from incompatible development adjacent to installation boundaries. The program also provides conservation value



and ecological services to FS/HAAF, while buffering our neighbors from the noise, smoke and dust created by military training and management activities (i.e., prescribed burning and logging). Furthermore, the installation is actively involved with local communities through the Joint Land Use Study program to promote collaborative land use planning. The local governments' effective use of their land use planning authority helps leverage ACUB funds, provides for sustainable growth and ensures the sustainability of the installation's training mission as a national defense asset and a regional economic engine.

Land Use Management

FS/HAAF contains some of the most biologically and ecologically diverse areas in Georgia. These include habitat for RCW, large expanse of longleaf pine-wiregrass ecosystem and wetland areas. These resources also provide an aesthetic, recreational and economic benefit to the local community. FS/HAAF recognizes the value and importance of these unique resources and their contribution to the diversity of the region. The many cooperative conservation efforts with government agencies and private organizations demonstrate responsible, innovative and proactive ideas that are being implemented in pursuit of FS/HAAF's commitment to natural resource conservation.

Support from external partners also plays a critical role in the success of FS/HAAF's NR program. The major partners in the implementation of FS/HAAF's INRMP are the U.S. Fish and Wildlife Service, Georgia Department of Natural Resources (GADNR) and Natural Resources Conservation Service. Additionally, FS/HAAF's active ACUB program is implemented through a partnership with the Georgia-Alabama Land Trust with support from the U.S. Army Environmental Command (USAEC). Conservation of the longleaf pine

ecosystem on a regional scale is supported by a memorandum of understanding with the Longleaf Alliance, GADNR and numerous other partners. FS/HAAF partners with federal and state agencies, universities, research institutions and non-governmental organizations to ensure that environmental activities are backed by the best science available. The efficient and respectful relationships developed through these partnerships promote creative solutions to ensure sustainability of our military training capabilities and quality of life for surrounding communities.

Forest Management

FS/HAAF's forestry program is one of the largest and most well managed in the DoD. It provides Soldiers with a superior training environment while maintaining important habitat for TES and other wildlife. Prescribed burning, timber thinning and restoration of longleaf pine and wiregrass are the primary management tools used to achieve these results.

To keep forest fuels manageable, the Forestry Branch maintains a prescribed burning program that is recognized by national fire experts as one of the largest in the world. An aerial ignition system and ground ignition terra-torches are used to implement this record-setting burn program. These prescribed burns create a forested grassland preferred by TES and more suitable for military training.

The Forestry Branch also maintains an extensive timber harvest program, conducting timber sales on 5,531 acres during the award period. During the competition period Fort Stewart sold \$5.3 million of timber in support of the Army's Conservation Reimbursable and Fee Collection Program. These harvest actions improve and enhance military training lands as well as threatened and endangered species habitat. From FY19-FY20, Forestry also harvested 246 acres of resinous pine stumps, 68 acres of pine straw, and 53,116 lbs. of saw palmetto berries. Additionally,



the Forestry Branch conducted 246 acres of timber thinning IAW the Cantonment Area Wildfire Protection Plan during the award period. These thinning activities and future prescribed management actions help reduce the threat of wildfire related damages to people and property on and off the installation.

- In addition to its normal duties, the Forestry Branch also provides wildland fire and forest management assistance nationwide. Through a partnership with IMCOM's Wildland Fire Working Group, including Deputy Chief of Staff, G9 (formerly ACSIM) and other Garrisons, FS/HAAF was the first Army installation to host wildland fire training for Army and Air Force personnel in FY15. The installation continued to host this training during the award period. FS/HAAF also has ongoing partnerships with various other agencies, including the National Interagency Prescribed Fire Training Center, Townsend Bombing Range, U.S. Forest Service, Georgia Forestry Commission, and Fort Jackson to assist their wildland fire and forest management programs. During the award period, a nine-year Mutual Aid Agreement was signed between the Georgia Forestry Commission and Fort Stewart for mutual wildland fire fighting assistance.
- Per the agreement, both parties will augment the fire protection assets available in their areas in the event of large wildfires occurring within their respective jurisdictions.

Fish and Wildlife

- FS/HAAF is committed to proactive conservation of TES. For the RCW in particular, the result of this commitment has been a resounding success. The RCW population on FS surpassed the recovery goal of 350 PBGs in 2012 and reached 582 PBGs in 2020. A major element of the RCW management strategy involves prescribed burning. The prescribed burn program sustains the longleaf pine-wiregrass ecosystem. This open landscape is highly desirable for military training,

as well as RCWs and other TES. NR managers, military training staff and Soldiers agree that this is a win-win strategy, a better training landscape with fewer training restrictions, and a healthier ecosystem.

FS/HAAF foresters use single-stem selection to thin timber stands rather than clear-cutting and replanting on a large scale. This allows the retention of larger, older trees and helps create a balance of timber age classes that are characteristic of longleaf pine-wiregrass ecosystems. In former agricultural fields, where longleaf pine and native wiregrass groundcover have been displaced, off-site pines are clear cut, and longleaf seedlings and wiregrass are replanted to create habitat that is preferred by RCWs, GTs, and numerous other rare species. One such species is the eastern indigo snake. FS/HAAF continues to have the largest eastern indigo snake population in Georgia. Survey data from FY19 and FY20 indicate a population of 134 snakes (69 males and 65 females).



The longleaf pine–wiregrass ecosystem provides benefits to both military training and TES. This habitat provides excellent line of sight and maneuverability to Soldiers and supports rare species such as the RCW, frosted flatwoods salamander, and gopher tortoise.

In support of the well-being and quality of life of Soldiers and their Families, the Directorate of Family, Morale, Welfare, and Recreation (DFMWR) provides managed deer/hog hunts,



bass tournaments and children's fishing events. From FY19-FY20, there were 1,425 participants in the 19 fishing events and five managed hunting events that were held on the installation to help introduce young Soldiers and their Families to these traditional pastimes. Rest and recuperation are paramount to Soldiers' well-being and



Access to hunting and fishing areas supports the morale of Soldiers and Family members at a very reasonable cost.

FS/HAAF prides itself on providing numerous hunting and fishing opportunities for Soldiers to enjoy alone or with their Families.

America's hunters and anglers were among the nation's first conservationists. FS/HAAF provides abundant opportunities for Soldiers, Families and area residents to enjoy the outdoors by hunting, fishing, bird-watching, etc. DPTMS provides F&WL with weekly information on which areas are not in use for training. An automated system (iSportsman) operated by F&WL then allows users to check into and out of training areas via the internet, and limits the number of hunters allowed to check into a particular area to help ensure safety. The automated system has allowed FS/HAAF to maximize recreational opportunities, 148,713 visits for hunting and fishing from FY19-FY20, while ensuring the safety of users and preventing disruption of military training activities.

Conservation Education

The installation's robust public outreach program targets both the FS/HAAF community, as well as its neighboring communities. From FY19-FY20, the NR team conducted 287 public outreach events that reached over 45,000 area residents at schools (both on- and off-post) via Earth Day events, community showcases, community safety days, and back to school fairs. These events increased conservation awareness, which is instrumental in creating conditions needed to successfully conduct NR management. Through this public outreach program, the NR team is able to reach an audience far beyond the installation's boundaries.

The FS/HAAF NR team also provides conservation and TES awareness training to all military personnel during the in-briefing process and during regular Environmental Compliance Officer training. Information and rules on specific NR and other environmental requirements are provided to ensure compliance with federal, state and military regulations.

FS/HAAF's approach to awareness stresses education. This approach provides Soldiers, Military Families and local community members with insight into the installation's NR management activities. This instills a sense of trust and support for the installation and its NR program, while upholding the excellent reputation FS/HAAF has with local communities. FS/HAAF's NR team is dedicated to balancing the Army's triple bottom line of Mission, Environment, and Community.

Conclusion

The lands on FS/HAAF have been used to serve our nation's defense for well over half a century and this legacy is not taken lightly by those who use them today. The NR team is dedicated to future generations who will use these lands and their resources.