

**NOMINATION FOR
SECRETARY OF DEFENSE ENVIRONMENTAL SECURITY AWARD**

Category: **Natural Resources Conservation – Small Installation**

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Introduction:

Defense Supply Center Richmond (DSCR), located along the I-95 corridor in southern Chesterfield County, Virginia, has been a consistent, dependable supplier of quality goods and services to those defending freedom around the world since it was activated in 1942.

Designated as the lead center for aviation within the Defense Logistics Agency, the center serves within the Department of Defense (DoD) supply chain as the primary source of supply for the nearly 850,000 repair parts and operating supply items.

While these items and parts have an extremely wide range of applications, our core mission is to supply products with a direct application to aviation. These items include a mix of military-unique items supporting over 1,300 major weapons systems and other items readily available in the commercial market.

With over 600 acres and approximately 120 warehousing, utility and administrative buildings totaling over 6.7 million square feet, DSCR is host for a number of other DoD, Federal and state organizations. The largest of these tenants are the 350-acre Defense Distribution Depot Richmond, Virginia; the Defense Distribution Mapping Activity; the Virginia Army National Guard vehicle maintenance activity; and the Defense Reutilization and Marketing Office.

The center and its tenant activities employ nearly 3,000 civilians, Service members, and contractor personnel, whose mission is to provide critical material support across the DoD and other Federal agencies, including the National Aeronautics and Space Administration.

Background

At DSCR the Support Services Directorate oversees natural and historic properties management. Natural resources staff consists of environmental engineers and an environmental scientist, who contribute to the program through specific expertise in plant materials, ecology, soil science, wetlands, forestry, and water resources. Additionally, a wildlife team consisting of eight DSCR employees has been formed in concert with the

Wildlife Habitat Council's Wildlife at Work Program certification efforts. DSCR administers the DoD's Agreement on the Chesapeake Bay, which involves sampling, water quality testing, and reduction of excess nutrient flow into a nearby major tributary of the bay from both applied and natural nutrient sources.

Partnerships with local primary and secondary schools provide a venue for visits to school classes to provide information to students on DSCR's natural resources and conservation program as well as potential careers in these areas. Additionally, natural areas on the base can be utilized by classes for field visits geared toward specific learning objectives.

According to professional archaeological survey work conducted at DSCR by R. Christopher Goodwin & Associates, Inc., Native Americans of the Middle Archaic Period first inhabited the property that is now DSCR as early as 6,800 B.C. European settlers first arrived in 1619. The land was in agricultural use until 1941, when the U.S. Army purchased it for construction of a supply depot. From the late 1800s till its purchase by the Army, the property was in the possession of the Bellwood family and was considered a model of innovative agricultural practices and conservation. Over the years this family farm won a number of awards for the production of row crops and domestic animals. The Bellwood Family was originally from Canada and imported a herd of Wapiti Elk. The elk were a part of the deal when the Army purchased the property in 1941. The elk still reside on 23 acres of property that is listed, along with the house, on the National Register of Historic Places.

Program Summary

In conjunction with the installation's major mission as the lead supply center for aviation systems support, DSCR maintains intensive use of the property for office space and warehousing while at the same time preserving a large portion of the natural brown forest soil matured over-story tree environment. Virginia Commonwealth University (VCU) conducted a natural resources survey of all animal and plant species present on the installation.

A Threatened or Endangered Species Impact Review has resulted in a negative finding. This means that no threatened, or endangered plant and animal species, unique or exemplary natural communities or significant geologic formations are present. Five acres of wetlands have been delineated at DSCR. Two perennial streams and one surface-water-impounded pond are present on the facility.

A second avenue of certification with the Wildlife Habitat Council, the Corporate Lands for Learning Program, is being investigated. The U.S. Army Center for Preventive Health and Medicine has prepared an evaluation of VCU's natural resources survey data and made recommendations for enhancement of the natural environment on the installation.

Areas in which DSCR is concentrating natural resources management efforts are:



Maintenance of the Elk --
Presently a DSCR Wildlife Team project involves renovation of the open pastureland with clover and warm season grasses and the wooded pastureland with wild rye.

At this writing DSCR is faced with the challenge of maintaining a far greater number of animal units on the same area of land. This is due to the existence of chronic wasting disease in the United States and the

subsequent embargo of deer and elk shipments.

Because of this embargo it is no longer possible to send excess animals, even in an apparent healthy state, to state and Federal parks and other governmental facilities as has been done in the past to cull back the number of animals on the limited pasture land available at the facility.

Maintenance of the mature Eastern Red Oak –

This forested over story is found over much of the installation in a healthy condition. It provides significant habitat for small mammals and perching birds.

Annually Boy Scout and/or Girl Scout troops have collected acorns for the Potomac Watershed Alliance's Growing Native seed collection effort. These projects delivered 83 pounds of viable acorns to the Virginia Department of Forestry in calendar year 2003 for germination to provide seedlings to help vegetate the Virginia portions of the Chesapeake Bay watershed where vegetative buffers will provide water quality benefits.



DSCR replaces trees lost to construction projects at the ratio of two to three replacements with like species for each tree loss.

An Eastern Red Oak tree canopy was left in place the area where the DSCR Child Development Center was built and serves as a vegetative buffer and is providing water quality benefits to enhance the natural watershed. The Eastern Red Oak tree canopy was also left in place in the recreation area adjacent to the one pond on the installation.

This philosophy has allowed multiple uses of the land while allowing the maintenance of the tree canopy and its microclimate effects, wildlife habitat, and storm water flow mitigating/soil-enhancing benefits.

Establishment of a policy to plant more native evergreens.



Numerous North American Juniper and American Holly specimens date from the World War II era and provide an abundance of shelter, feeding, and nesting opportunities for songbirds.

About 3,000 feet of junipers were recently planted, principally to screen a contractor lay down area. Additional native evergreens are being planted whenever an opportunity avails itself for planting to enhance the

aesthetics of the landscape. These evergreens provide excellent winter habitat for songbirds, microclimate improvement, numerous nesting and feeding opportunities, and enhanced soil erosion control versus stands of deciduous trees due to the more fibrous feeder root systems developed in evergreen stands.

Principal roadways on the installation have had fruit bearing deciduous trees planted along them. These plantings provide numerous habitats and feeding and nesting opportunities for songbirds and nectaries for pollinators, while at the same time improving the aesthetics of the facility. Several butterfly gardens have been established, and additional ones are planned.

Wildlife “no-mow zones” have been established in the vicinity of riparian wetlands, emergent wetlands, and forested, seasonally flooded wetlands, as well as adjacent to the margins of streams.

DSCR is in total compliance and on the leading edge of work with the DoD/Environmental Protection Agency/ State Memorandum of Agreement on the Chesapeake Bay, which is aimed at



reducing non-point pollution from federal facilities in the Bay watershed. Presently we are conducting quarterly heavy metal, pesticide residual, organics, and nutrient loading sampling and testing to assure that water quality in streams adjoining the property is not degraded. In the near future, a contract will be let for sampling, laboratory testing and developing a nutrient management plan to assure that mineral and organic nutrients from applied and natural sources pose no threat of water quality degradation.

Tree debris from the results of Hurricane Isabelle consisted of an estimated 300 cubic yards of material.

The debris has been collected, centrally located and will be shredded and applied as mulch installation-wide. This will recycle mineral and organic nutrients currently bound up in this debris on site.



Significant Accomplishments -- Overall Conservation Management

Coordination and integration of natural resources with the military mission is accomplished through internal interaction between DSCR's Environmental Office and Facilities Engineering Operations Office, the Virginia District Fort Lee Sub Office of the Corps of Engineers, and the DSCR Health and Safety Office.

Input is elicited from the various state, county and Federal regulatory agencies as well as private foundations such as the Chesapeake Bay Foundation and the Wildlife Habitat Council. Internal coordination is achieved through frequent interaction, team and committee meetings, training sessions, and standard operating procedures, policies, and regulations. Coordination is also achieved during the development and implementation of various natural resources management plans, partnerships, and cooperative agreements.

Overall conservation and natural resource base improvement has been noted installation-wide. Currently a baseline inventory with quantifications has not been developed for plant and animal communities on the installation.

Ecosystem, Land, And Water Management

The major ecosystem in place is a typical mature hardwood forest tree canopy in a warehousing, office, and parking lot land-use situation. Basically, this condition lends itself to a basic urban forest or green belt area, which while not ideal from a standpoint of species diversity development, does provide habitat for small mammals and birds and a food base for birds of prey.

Numerous red tail hawks and peregrine falcons have been noted preying on eastern grey squirrels on the installation.

Perimeters of the installation are, for the most part, bordered by perennial streams and stream margins with adjoining mixed upland and wetland forest over story with shrub interfaces typical of eastern American forest and/or stream/wetland interfaces. These areas are prime territory for stopovers by migrating neo-tropical bird species and, in the early spring, thousands of birds of various species can be observed roosting overnight on their stopovers while traveling the eastern American flyway. Parker Pond is frequented by flocks of up to several hundred Canada Geese during winter months. DSCR has no agricultural out leases.

Accomplishments during the award period include:

- Accessing a U.S. Army Fort Carson cooperative agreement with Wildlife Habitat Council through U.S. Fish and Wildlife Service to provide payment for wildlife expertise.
- Formation of a DSCR wildlife team.
- Preparation of a wildlife opportunities report for the Wildlife at Work certification area and an opportunities report for the Corporate Lands for Learning certification area.
- Training of members of the wildlife team in Wildlife Habitat Council program areas.
- Review of compliance requirements to allow on site use of vegetation debris resultant from Hurricane Isabelle.

Conservation Education

DSCR has a partnership program the local county school system, notably with three elementary schools and one high school. DSCR employees may volunteer to work with a given school and class in a support role or in providing instruction in various areas related to the curriculum of a given subject class. Additionally, DSCR environmental personnel visit several schools each year and provide information on environmental engineering and environmental science during career days. Schools not currently in the partnership program may make specific requests for assistance with conservation education.

Conclusion

DSCR has for over sixty years continued the Bellwood Family's tradition of commitment to the natural environment and for genuine wildlife habitat conservation by leaving various aspects of the natural environment, notably mature trees, streams, and wetlands in place wherever possible.