Executive Summary

Wartime and the Postwar Years

The 1 December 1941 transfer of all construction responsibilities from the Quartermaster Corps to the Corps of Engineers included maintenance responsibilities. Maintenance, in turn, included grounds maintenance and pest control. Initially, representatives of the Corps of Engineers did not want to be saddled with these chores and resisted this part of the transfer. Colonel Leslie R. Groves, Operations Branch Chief of the Office of the Quartermaster General Construction Division, and later the Deputy Chief of Construction, Office of the Chief of Engineers, viewed them as more appropriate to the housekeeping duties of the quartermasters. However, the prevailing view in Washington was that those who built the structures should maintain them.[1]

The new Construction Division under the Office of the Chief of Engineers retained the same five branches as the division had held under the Quartermaster Corps. One of these was Repairs and Utilities.[2] Reporting to the Repairs and Utilities Branch was a Maintenance and Repair Section. Under this section was a Grounds and Grassing Unit responsible for grounds maintenance and erosion control. (See Appendix A, charts A-1 to A-3.)

During World War II, land management consisted largely of dust and erosion control at newly constructed military installations. Natural resources management at this time strove only to maintain adequate living conditions for the troops and prevent the elements from interfering with training. "Spartan simplicity" was the

order of the day.

After the war, Repairs and Utilities became a division under the OCE Military Construction Directorate. Under the Repairs and Utilities Division (R&U), the Buildings and Grounds Branch (B&G) included three sections that dealt with natural resources: Grounds, Land Management (which included forestry and wildlife management), and Entomology. The organizational structure for natural resources management remained thus through the 1960s.

An agronomist headed the Land Management Section, and a forester reported to him.[3] The branch's major functions were to make policy, approve plans, and allocate resources for Army-wide land management. The individual army headquarters and the installations mirrored this structure, with each headquarters and installation ideally staffed by a land manager/agronomist, a forester, and an entomologist. Typically, at all levels the forester reported to the land manager while the entomologist did not.[4] In practice, entomologists were rarely assigned to the installations. Not all installations had this staff structure: smaller installations had to rely on the natural resources management staff of the nearest larger installation.[5]

Following the war, natural resources management progressed beyond such emergency concerns as land stabilization to the fostering of beneficial ground cover crops or tree species suited to the military purposes for which the Army held the land. During this period, Army foresters began to develop innovative techniques for controlling the frequent fires caused by training exercises.

Professional land managers also promoted nonmilitary uses such as timber production and agricultural leasing because they assisted in maintaining land in good condition while saving the Army labor. Since

forest management caused wildlife populations to flourish, installations permitted hunting to control wildlife populations and keep the land from being overbrowsed.

The postwar period also saw the recruitment and hiring of civilian professional agronomists, foresters, and entomologists (with bachelors' degrees or equivalent experience) to staff the army commands and installations. By the close of the 1950s, most installations had developed land management plans that were approved by the OCE Buildings and Grounds Branch. Lack of official support for sufficient professional staffing, particularly in the field, remained an ongoing challenge.

The 1960s

At the beginning of the decade, Public Law 86-797, "An act to promote effectual planning, development, maintenance, and coordination of wildlife, fish, and game conservation and rehabilitation in military reservations"--known as the Sikes Act of 1960--established procedures for conserving fish and wildlife and allowing public access to outdoor recreation on military land. The act and its subsequent amendments were to have an enduring influence on Army natural resources management.

Buildings and Grounds' primary task remained the review of installation management plans. The required number and scope of these plans expanded to include landscaping, land management, forest management, and fish and wildlife management plans, plus cooperative plans for conservation and development of fish and wildlife resources. The evolution of scientific knowledge about natural resources management during this decade necessitated the overhaul of Army regulations and

technical manuals, a task which also occupied much staff time at Buildings and Grounds.

While erosion from new construction had been largely controlled, problems persisted in specific areas such as ammunition storage igloos. More importantly, tank maneuvers caused additional erosion, which had to be rectified through revegetation.

No longer did the rule of Spartan simplicity prevail for landscaping and grounds maintenance practices. A drive for beautification of military bases, fueled by public opinion and encouraged by the First Lady, Lady Bird Johnson, accelerated.[6] Construction projects now had to include landscaping in their plans and preserve the natural features of the site.

The multiple use and sustained yield concepts, required by public law for management of national forests, entered into land and forest management. Henceforth, land management had to support more than military training. The production of crops and timber, conservation of wildlife, and public recreation occurred on Army land whenever possible.

Army forest management activities and timber production expanded rapidly in response to a landmark provision in the 1961 military appropriations bill. Commercial loggers and installation commanders alike had sought this provision, which allowed installations to pay for forestry activities directly from timber sales proceeds. This lent unprecedented stability to the funding source. This stability benefited not only forest management activities, but enhanced wildlife habitats, outdoor recreation, fire prevention, and military training areas as well. Yet many such benefits of land management remained unappreciated from a standard accounting perspective. Army land managers periodically debated the realistic valuation of land management costs and benefits.

The development of new and more effective pesticides brought with it increased risks to both handlers and the environment. The increased risks of contamination caused the expansion of training requirements for pest control. In addition, the public and the federal government took a closer interest in the military's use of pesticides.

1970 to 1987

The Army natural resources management program strove to mount an integrated response to the public's interest in protecting the environment.[7] While the daily tasks and goals of natural resources management remained basically unchanged, the policy behind them came to be based largely on environmental legislation and public pressure.[8] The growing importance of environmental protection culminated in the 1987 reorganization which moved the OCE natural resources management functions from the Buildings and Grounds Branch to the Environmental Office. This reorganization mirrored similar earlier changes at many installations.[9]

After 1970, the Buildings and Grounds Branch had been moved among several different directorates, including Facilities Engineering. However, it continued to discharge the same responsibilities and to be known as Buildings and Grounds until the 1987 reorganization. Up to 1 October 1987, an office separate from Buildings and Grounds dealt with environmental issues, despite the natural overlap in the concerns of the two offices.

Of the host of laws, both old and new, affecting the branch's work during the 1970s and 1980s, the most influential were the amendments to the Sikes Act of 1960 (Public Law 86-797), the National Environmental Policy Act of 1969 (Public Law 91-190), the Endangered Species Act of 1973 (Public Law 93-203), and the military

appropriations bills that permitted installations to use the proceeds from timber sales (1961) and agricultural leasing (1983) for natural resources management activities.[10]

The Sikes Act amendments permitted the collection of fees for hunting and their expenditure on wildlife conservation programs. The National Environmental Policy Act required environmental impact analyses for any environmentally significant activity on federal government land. The Endangered Species Act prohibited the expenditure of federal funds on any activity that would jeopardize an endangered or threatened species.[11] The ability to retain and use timber and leasing proceeds provided a measure of funding stability to natural resources management programs. The programs became largely self-sustaining and had less need to compete for scarce appropriated funds.[12]

Public relations grew in importance as public knowledge about conservation issues and awareness of Army activities and their impact on natural resources increased. Public pressure for both recreational access and wildlife conservation became a fact of life.

The period extending from the early 1970s through fiscal year 1987 saw a gradual evolution in the daily tasks and overall mission of Buildings and Grounds. During the early 1970s, the basic duties remained review of installation plans, supervisory visits, technical assistance, and resource allocation. However, it became necessary to spend more time providing policy guidance as environmental laws proliferated. In 1975, the chief agronomist decided to stop reviewing installation natural resources management plans, to cut back the amount of travel to installations, and to devote more effort to policy development and administrative tasks.[13]

The improvement in natural resources staff and expertise at the commands and the installations made

this decision possible. The staff-building efforts of the early decades had finally paid off. The agronomists and foresters at the command level were now capable of providing the necessary supervision, plan review, and technical assistance to the installations. In addition, despite the continued Department of Defense (DOD)-wide lack of support for staff increases, many installations had built outstanding staffs and programs which were capable of operating independently.[14]

Due in part to the increased sophistication of installation firefighting skills, erosion reemerged to replace fire control as the number one problem in the 1980s. Modern armored vehicles were both heavier and more mobile than those of the past, causing much greater damage to soil and vegetation.[15]

Problems associated with preserving training grounds were particularly acute at overseas installations. The local environmental pressure in the host countries of Europe was even more intense than in the United States because the land area of most of these countries was smaller and the Army leased rather than owned the land.[16] Buildings and Grounds provided general policy guidance to overseas installations. As was done by their stateside counterparts, the major commands overseas assisted the installations with technical aspects of natural resources management. From the late 1970s, the commands proved increasingly capable of independent operation and no longer required supervisory visits.

In the late 1970s, Army agronomists, foresters, and wildlife biologists began to recognize that they were harming their programs by competing for scarce resources. By 1977, the requirement for a single installation natural resources management plan replaced the separate landscape, land, woodland, and wildlife management plans.[17] At Buildings and Grounds and many

installations, agronomists, foresters, and wildlife biologists became known as natural resources specialists or environmental protection specialists. Another amendment to the Sikes Act mandated an integrated approach to wildlife and forest management, forcing foresters and wildlife biologists to compete less and cooperate more.[18]

Foresters grew more knowledgeable about wildlife management as a result.[19] Thus, the separate disciplines of agronomy, forestry, and wildlife biology became parts of a single integrated field--natural resources management.

Notes

1. L. Fine and J.A. Remington, The Corps of Engineers: Construction in the United States (Washington, DC: Government Printing Office, 1972), pp. 463-472.

2. Ibid., pp. 473 and 494.

3. Interview, authors with Wendell R. Becton, Gainesville, GA, 15 January 1988. Hereafter cited as Becton interview.

4. Interview, authors with Burton F. Kiltz, Arlington, VA, 22 January 1988. Hereafter cited as Kiltz interview.

5. Becton interview.

6. Interview, authors with Donald Bandel and Donald Cole, Washington, DC, 23 March 1988. Hereafter cited as Bandel interview.

7. Interview, authors with Vance W. Mays, Glenwood, MD, 29 October 1987. Hereafter cited as Mays interview.

8. Bandel interview.

9. Ibid.

10. Ibid.

11. "Making Natural Resources Work for You," no date, File 3, Donald Bandel Historical Collection, Buildings and Grounds Branch, Corps of Engineers, Washington, DC. Collection hereafter cited as Bandel collection.

12. Bandel interview.

13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.

17. "Department of the Army Land Management Program," no date, File 3, Bandel collection.

18. Telephone interview, authors with Tom Warren, Fort Carson, CO, 7 April 1988. Hereafter cited as Warren interview.

19. Telephone interview, authors with John Andrews, Vienna, VA, 6 April 1988. Hereafter cited as Andrews interview.