



CHAPTER 1

About the Environmental Guidebook

This guidebook has been developed specially for use by military golf course superintendents to assist them in improving the environmental stewardship of their courses. It is designed as a step-by-step workbook leading to the development of an environmental plan for the course and the certification of the course at one of the three levels of achievement. It is not intended to serve as a “Best Management Practices” manual, but rather as a way of organizing a variety of management ideas and practices into a logical, across-the-board approach to overall environmental improvement. The guidebook was prepared by the Center for Resource Management (CRM), a national non-profit organization that facilitates and manages the Golf and the Environment Initiative, a national coalition of leaders from the golf industry and environmental community.

Project Background

The game of golf has always included the challenge of competing against oneself and the variable of the course environment. Historically, the game was shaped by the existing environment. As the game has grown in popularity and construction and maintenance technologies have improved, the image and demands of the game are now the dominant forces shaping the golf course environment. Course managers and superintendents are expected to provide a pest-free, weed-free, emerald green playing surface in every ecosystem from deserts to rain forests.

Most golf course managers rely on intensive inputs of irrigated water, chemical pesticides, and fertilizers to meet these expectations demanded by today’s courses and golfers. Regulators and citizen environmental groups have raised concerns, protests, and in some cases, litigation over possible water contamination, impacts on wildlife habitat, excessive water use, noise pollution, and related land use issues.

In 1995 the Golf and the Environment Initiative (G&E) was formed as a partnership between leading organizations in the golf industry and the environmental community to address these issues in a collaborative way. The Center for Resource Management has been the catalyst, organizer, and facilitator in bringing the parties together in managing the work and activities of the coalition. The coalition developed the *Environmental Principles for Golf Courses in the United States*, a set of consensus-based guidelines for planning, building, and maintaining golf courses.



Lakeside Golf Course- Ft. Benning

As part of the Golf and the Environment Initiative the CRM received funding support from the Department of Defense Legacy Resource Management Program to develop a prototype environmental guidebook for military golf courses. A one-year demonstration project was conducted at the Lakeside Golf Course in Ft. Benning, Georgia to provide a test case and pilot model experience as input to the guidebook. Other input and guidance was provided by local and national advisory committees as well as from other organizations, programs, and individuals who have been involved in golf and environmental issues.

For example, site visits and interviews were conducted at fifteen military golf courses located in nine different states and all branches of the military. In addition, written surveys were completed by 69 military superintendents and 107 military golf managers. In the surveys 90% of military superintendents said the guidebook should provide simple step-by-step instructions for completing an environmental plan for the golf course. Eighty-four percent of superintendents and 88% of golf managers said military golf courses should follow a consistent set of voluntary environmental standards. Over 75% of both superintendents and managers agreed that the military should implement a program of environmental certification of golf courses and related awards for environmental achievement.



The input received from the various interviews and the two separate written surveys have been very helpful in guiding this project. The overall objectives of the project as reviewed and approved by the DoD Legacy Resource Management Program include:

- Assist superintendents and managers of military golf courses to improve the environmental performance of their courses by reducing chemical, water, and energy inputs while increasing outputs such as wildlife habitat, water quality, and better playing conditions.
- Provide a usable and consistent guide for course environmental improvement across all branches of the military.
- Help the military demonstrate and communicate their environmental stewardship commitment and activities to golfers and the larger community interested in these issues.

Organization and Use of the Guidebook

The guidebook is organized into six chapters plus appendices. **Chapter 1**, this chapter, explains the background of the project and the use of the guidebook. **Chapter 2** explains why making environmental improvements makes sense, including cost savings and other benefits. **Chapter 3** is the “workbook” section of the guidebook that provides the step-by-step process for analyzing the course, and preparing and implementing an environmental plan. Various activities are described as part of this process and fill-in-the-blank forms are provided for the superintendent to easily complete and record each task outlined. When Chapter 3 is complete it represents the golf course environmental plan and can easily be photo copied for review by others. The guidebook was organized in a binder format so that the various forms can be reproduced or taken out of the binder and used on a clipboard in the field if necessary. Other relevant materials can easily be added to the binder or official updates or changes can be made if necessary. The planning process requires the development of a golf course map and suggests the use of transparent overlays as both an analytical and presentation tool. Included in the appendices are sheets of clear plastic which can be used to prepare different types of map overlays.

Chapter 4 describes the process and rating criteria necessary for a course to become certified at one of three different levels of achievement. The criteria are based on the guidance standards used in the course baseline assessment checklist and program strategies contained in the environmental plan from Chapter 3.

Chapters 5 and 6 outline the benefits and guidance for connecting the efforts of environmental stewardship to other related programs, activities, and organizations both in the military and in various non-military sectors. These chapters try to make the case that environmental stewardship is enhanced and more effective and rewarding when connected with other relevant disciplines, programs, and people.



Admiral Baker Golf Course

Finally, the **appendices** include a diversity of background and reference information to help support and augment the information and activities included in Chapters 1 - 6. Other relevant information, studies, contact lists, notes, etc. can be added at the discretion of the user.

The guidebook was designed as a simple working tool to help the golf course superintendent assess his/her course and prepare and implement an environmental plan. Those who choose to seek certification for their golf course can easily copy the plan and with a few other materials apply for this recognition of achievement.

Some courses may have already completed much of what is contained in the guidebook and will find the exercise easy to complete. Others may find the process and standards taking them into new areas and the requirements difficult. Completion of a good environmental plan and the achievement of certification will probably require a multi-year effort.

The guidebook should be used as a broad framework to identify goals and priorities and organize specific tasks to accomplish the desired objectives. The workbook format, checklists, and fill-in forms are included as a means to minimize and simplify the writing and paperwork involved.