Table 12. Nesting blocks were set out on each golf course (onsite) and in three additional reference sites (off-site). Each nesting block was drilled with rows of varying sized holes (50 total) to attract different genera and species of bees.8

Site Description	No. of Blocks	Hole Size	No. of Nests	Cells per Nest	Bees	(Bee Type)	Wasps
Wildhorse Onsite	17	4	2	0			
		5	57	7.7			
		5	80	8.3			
		7	25	5.4			
Totals			164		142	(leafcutter)	24
Horn Rapids Off-site	20		7	9	5	(leafcutter)	2

Note: More nesting block data will be tabulated by next year. The nesting blocks were still being actively used at the end of the 1998 reporting period and were not shipped to the USDA laboratory in Logan, UT for analysis.

(also included in this report) for that area, but did not do a soil analysis or an historic comparison.

Future Objectives. Having established baseline data for 1997, the next step is to identify the insects collected during the full field season of 1998. That information will be furnished by the USDA Bee Biology and Systematics Laboratory in Logan, UT during 1999. A major 1998 through 1999-project goal is to increase the numbers of native plants used in the out-of-play landscaping of the three golf courses. The annotated plant lists are being used by superintendents to purchase landscaping materials. The Xerces Society is also supplying plants for this initial enrichment. The pre-enrichment data on native bees, wasps, plant, and nest-sites will then be used as a baseline to compare insect data gathered in subsequent, post-enrichment years. The plant enrichment program is beginning in late fall 1998 and will continue throughout the project. The project scientists also plan to expand the use of nesting sites on the golf courses to bolster the local populations of native bees and wasps. Sand nests, nesting blocks, trap nests, and log nests will be added in appropriate locations. The nests will be analyzed for species and number of cells.

During 1999, the Xerces Society will produce a *Pocket Guide to Insect Pollinators.* This guide is for the lay audience and will include color illustrations and basic life history information for the common groups of North American pollinating bees, wasps and flies. The guide will allow a lay person to identify the groups of bees, wasps, and flies that are the ubiquitous pollinators. It also will provide sufficient information on the appearance, habits, and life histories of most native bees and wasps. As material for the publication is produced, Xerces will produce educational sheets for the golf courses. The aim of this project is to educate people about the major groups of pollinating insects, to encourage them to use pollinator-attracting plants in their own backyards, and to notice and appreciate beneficial insects while spending time outdoors. As people gain knowledge about the diversity of insects responsible for pollination and the habitat requirements for sustaining pollinators, native plant restoration efforts will gain momentum and insect pollinators will thrive. The pocket guide will be produced under rigorous scientific standards, emphasize the beauty and fascinating biology of pollinators, and encourage the reader to appreciate these beneficial insects.

The Audubon Cooperative Sanctuary System Program for Golf Courses

Audubon International

Ron Dodson

With support from the United States Golf Association, the Audubon Cooperative Sanctuary Program (ACSP) for Golf Courses was created in 1991. The ACSP promotes ecologically responsible land management and natural resource conservation. Participation in the program assists golf land managers to plan, organize, implement, and document comprehensive environmental management programs on golf courses, while preserving the natural heritage of the game of golf. The goals of the program are to:

1. Enhance wildlife habitats on existing golf courses by working with the golf course superintendent and providing advice for ecologically sound course management;

2. Encourage active participation in conservation programs by golfers, golf course superintendents, golf officials, and the general public;

3. Recognize the people who are actively participating in environmentally responsible projects; and

4. Educate the public and golfing community about the benefits of golf courses and the role they play relative to the environment and wildlife.

ACSS accomplishments during the past year can be broken down into three categories: A) Seminars And Presentations, B) ACSS Golf Member Awards And Recognition, and C) Program Accomplishments.

A. Seminars & Presentations
- Golf & the Arizona Environment Conference, Phoenix AZ
- Wildlife Management & Habitat Conservation (Developing an Environmental Plan), Rutgers University
- Creating an Environmental Plan, Mid-Atlantic Association of Golf Course Superintendents
- Golf & the Environment Conference, Orlando, FL
- South Dakota Superintendents Association Annual Conference, Sioux Falls, SD
- Wildlife Management & Habitat Conservation Seminars
  Northeast Turfgrass Association Conference, Syracuse, NY
  GCSAA Conference & Show, Orlando, FL
  South Dakota Superintendents Association, Sioux Falls, SD
- USGA Green Section Regional Conference, Creating an Environmental Plan, Orlando & Palm Beach Gardens, FL

B. ACSS Golf Member Awards & Recognition
- GCSAA Environmental Steward Awards: 33 out of 37 winners were ACSP members
- 3M Tartan Park, MN: 3M's Environmental Leadership Award
- Panama Country Club, FL: National Society of the Daughters of the American Revolution award for Distinguished Conservation Record
- Superior National at Lutsen, MN: Department of Natural Resources grant recipient to enhance wildlife habitat

C. Program Accomplishments
- Golf & the Environment Status Report & Recommendations
- Project Flight Plan: 208 golf courses participated pledging to complete 1487 projects to enhance and protect habitats for migratory birds.
- ACSS Case Studies: Completed case studies of nine certified golf courses
- ACSS Case Study Master List: Master list of exemplary golf course conservation projects including contact people.
- ACSS Case Study Project Survey: Survey of 160 certified golf members to elicit more detailed case studies of conservation projects.
- Review and revise goals, objectives, and certification process to increase self-evaluation, increase project options, and increase educational opportunities in environmental planning.
- Review, revise, and update environmental fact sheets.

There are currently 2,212 golf course members (including 200 Canadian members) of which 174 are certified Audubon Cooperative Sanctuary golf courses. These include 14 Canadian, 1 Southeast Asian, and 2 European golf courses.