Audubon Cooperative Sanctuary Program for Golf Courses





Welcome

Dear Audubon Cooperative Sanctuary Program Member:

Welcome to the Audubon Cooperative Sanctuary Program for Golf Courses. This handbook is designed to help you assess your property resources and then develop an environmental plan that fits your unique setting and needs. It also provides all the information you will need to document your efforts and achieve designation of your golf course as *aCertified Audubon Cooperative Sanctuary*.

Audubon International will also award a personal *Certificate of Recognition in Environmental Planning* to the individual who is primarily responsible for completing the Site Assessment and Environmental Plan. An additional *Certificate of Recognition in Environmental Stewardship* will be awarded to the person who is principally responsible for completing all components of certification at a single golf course. This recognition may be used to promote your commitment to stewardship and competency in implementing a comprehensive environmental management program.

The Certification Handbook is divided into five sections:

- Step 1: Planning
- Step 2: Action
- Step 3: Documentation
- Step 4: Certification Site Visit
- Step 5: Staying Certified

Simply begin with Step 1, and then proceed to subsequent sections when you are ready. You may apply for certification one step at <u>a time</u>; you <u>do not</u> need to wait until you have completed all components of the program. The background information and instructions provided in each section will give you specific information for achieving certification.

We look forward to getting to know you and your course and to helping you gain recognition for safeguarding the quality of the environment. Thanks for your participation!

Sincerely,

The Staff at Audubon International

Top 10 Reasons to Get Certified

- 1. Do the right thing for the environment
- 2. Enjoy a new and rewarding aspect of your job and be able to share it with others
- 3. Gain positive publicity for your golf course
- 4. Better organize and coordinate your environmental management efforts
- 5. Track environmental improvements
- 6. Save money through reduced resource use
- 7. Build your skill set and your resume
- 8. Promote your stewardship efforts
- 9. Be recognized as a community and golf industry environmental leader
- 10. Gain valuable feedback from Audubon International

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Step 1: Planning

Fill out your Site Assessment and Environmental Plan. Send it to Audubon International.

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Statement of Support

Step 2: Action

Implement environmental management practices outlined in your plan. Begin compiling backup documentation for certification.

Step 3: Documentation

Fill out a Request for Certification Form to document what you have done in each component of the program. You can send in one form at a time or multiple forms, as you wish. They do not need to be completed in any particular order.

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Step 4: Certification Site Visit

The final step for certification is a site visit by an Audubon International staff member to document that certification standards have been met. The certification visit is an opportunity for you to share what you have accomplished with Audubon International. A final determination regarding certification is made by Audubon International staff once the Certification Visit is complete.

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Step 5: Staying Certified

Every three years, Audubon International requires that certified courses demonstrate that they are continuing their environmental efforts through recertification. This recertification switches every 3 years between a recertification site visit and a recertification backup documentation.

Audubon Cooperative Sanctuary Program for Golf Courses

Planning Site Assessment & Environmental Plan



120 Defreest Dr. Troy, NY 12180 (518) 767-9051

Step 1: Planning

Background Information

The Site Assessment and Environmental Plan is designed to help you take stock of your property resources and current conservation practices and develop a plan of action to guide your stewardship efforts. After you complete this step, we will also get to know your course and be able to work more closely with you as you implement conservation projects on your golf course.

This step consists of two parts:

Site Assessment- This form tells us about your golf course property and its significant natural resources. By filling out information regarding turf, natural areas, gardens, and water features, you will develop important baseline information about your golf course landscape.

Environmental Plan- This form helps you evaluate your current environmental management practices and determine appropriate conservation projects for your golf course. It includes goals, objectives, and environmental management practices that safeguard and enhance the quality of the environment.

Key Environmental Components

The Audubon Cooperative Sanctuary Program for Golf Courses is concerned with six key environmental areas relevant to golf course management. These components form the basis of our educational materials and are the focal points for achieving certification.

- Environmental Planning
- Wildlife and Habitat Management
- Chemical Use Reduction and Safety
- Water Conservation
- Water Quality Management
- Outreach and Education

General Instructions

- 1. Fill out your Site Assessment and Environmental Plan as completely as you can. If you don't know an answer, simply move on and come back to it later. If you need more space to provide information, attach an additional sheet and identify the question it relates to. Feel free to contact us with questions. If there is additional information, such as a brochure, photos, or a course description, that you would like to send us, please feel free to include it.
- 2. Choose one of the following ways to submit your materials:

E-mail scan or fillable PDF of this document, and all supporting documents to: acsp@auduboninternational.org

Audubon International Dropbox: <u>www.dropbox.com</u>

1. Login Email: files@au<u>duboninternational.org</u>



- 2. Login Password: audubon123
- 3. Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)
- 4. Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox
- 3. Submit via USB Drive to: 120 Defreest Dr, Troy, NY 12180

Questions? Contact us at 518-767-9051 extension 100 or via e-mail at acsp@auduboninternational.org.

Site Assessment

1. General Information

This section provides Audubon International with general property information and puts the property in its regional and local context.

State/Province	Zip Code
County/Municipalit	ty
) Box City	State Zip Code
E-mail Address	
Web Site Addres	S
General Manage	r
🗖 Municipal	□ Other:
Resort	
Golf/Residential Community	
Length of Golf Season	
Starting Month	
Ending Month	
Open for play year round	
Number	of years under former
land use	
Describe during re	what was done novations:
🗖 Suburban	Rural
	Low
	State/Province County/Municipality DBox City E-mail Address Web Site Address General Manage General Manage General Manage General Manage County Length of Golf Season Starting Month Ending Month Depen for play year round Open for play year round Describe during re

2. Management Context What unique features or constraints of your site have to be accounted for when managing in-play and out-of-play areas on your golf course? (Check all that apply and describe below.)

 Tight Layout High Expectations Regarding Playing Conditions 	 Major Tournaments High Expectations Regarding Aesthetics 	 Limited Staff Endangered/Threatened Habitats
Demanding Neighbors	Endangered/Threatened Species	Wetlands
Historical Sites	□ Other:	
Budget What is the total annual maintenance bu	dget for your golf course?	
Soil Describe the soil type for each area (<i>e.g.</i>	, sandy, loam, USGA green, <i>etc</i> .) How c	often do you conduct a soil test?
Greens		
Tees		
Fairways		
Roughs		
Other		
3. Irrigation What percentage of your irrigation come Well%	s from the following sources? River% Effluent	% Other:%
Spring%	City Water% Runoff	_%
Do you store irrigation water in an irriga	tion pond? 🗖 Yes 🗖 No	
How many acres receive irrigation?	Acres	
4. Environmental Context This section requests information about <i>sure? If in the US, visit <u>http://cfpub.epa.gov/</u> <u>http://multimedia.wri.org/watersheds_2003/</u> What is the nearest water body where th</i>	the larger landscape and watershed in w <i>(surf/locate/index.cfm to search by your add</i> <i>(index.html to locate your region of the world</i> e water from your course drains after it	hich your course is located. <i>(Not</i> ress. If internationally, use and define your watershed.) leaves your course?
From what water body does your course lakes, ponds, wetlands, estuary, ocean):	receive natural flow? (Name or brief des	scription of any streams, rivers,
What is your regional watershed?		
What is the predominant natural vegetat included in your new member packet) Surrounding Land Use	ion (plant community) in your area? <i>(th</i>	is is also known as your ecoregion,
North South	: :	

East: West:

5. Landscape Information This section requests information regarding the turf, landscape, and water features on your course. In addition, we'd like to know about some of your management practices to maintain these areas. This information will provide good "baseline" information that can be used as a measure of comparison between current and future landscape features.

Please refer to the following definitions when filling out the acreage information on the following page:

Gardens

Aesthetic Garden	Garden maintained with beauty as a primary goal
Wildlife Garden	Garden maintained with providing a food source for wildlife as a primary goal
Xeric Garden	Garden maintained with zero irrigation as the primary goal
Demonstration Garden	Garden maintained with education as the primary goal

Natural Plant Communities

Deciduous or Mixed Forest With Understory	Forest dominated by trees which annually lose their leaves, such as maple and oak, or a mix of deciduous and coniferous trees, with shrubs, young trees, or herbaceous plants under the canopy
Deciduous or Mixed Forest Without Understory	<i>See above, but with no shrubs, young trees, or herbaceous plants under the canopy</i>
Coniferous Forest With Understory	<i>Forest dominated by evergreen tree species, such as pine, spruce, cedar, cypress, and hemlock with shrubs, young trees, and herbaceous plants under the canopy</i>
Coniferous Forest Without Understory	<i>See above, but with no shrubs, young trees, and herbaceous plants under the canopy</i>
Shrubland /Scrubland	<i>Areas dominated by dense to open stands of shrubs with few to no trees present</i>
Woodland	<i>Commonly known as savannas and barrens – grasses or herbaceous plant dominate with sparse individual trees or groves</i>
Grassland/Prairie/Meadow	Open communities dominated by grasses or perennial herbaceous plants
Desert	Dry community often referred to as arid or semiarid lands
Freshwater Wetland	<i>Communities with water near or above the soil surface for a part of the year dominated by submersed and emergent aquatic plants, shrubs, or trees</i>
Saltwater Wetland	<i>Low-lying meadows frequently inundated by tidewater or saturated by floodwater draining from the uplands</i>

Estimating Acres							
1 acre	=	43,560 ft ²	=	4,047 m²			
1/2 acre	=	21,780 ft ²	=	2,023m ²			
1/4 acre	=	10,890 ft²	=	1,012 m ²			
1/8 acre	=	5,445 ft ²	=	506 m ²			
or visit : v	vww.	onlineconver	sion.	com			

Turf Surfaces	Turf Type(s) variety/cultivar	Mowing Heights low high	Acres
Greens			
Tees			
Fairways			
Roughs			
Other: (<i>e.g.,</i> lawn, practice range)			
		Total Acres	
Garden	Total Size (~ft ²)		
Aesthetic Garden			
Wildlife Garden			
Xeric Garden			
Demonstration Garden			
		Total (~ft ²)	

Natural Plant Communities	Total Acres
Deciduous or Mixed Forest With Understory	
Deciduous or Mixed Forest Without Understory	
Coniferous Forest With Understory	
Coniferous Forest Without Understory	
Shrubland/Scrubland	
Woodland	
Grassland/Prairie/Meadow	
Desert	
Freshwater Wetland	
Saltwater Wetland	
Other (please describe):	
Total Acres	

Ponds and Lakes	Qty	%Turf grass Shoreline	%Natural Shoreline	%Shallow Water Areas (< 2' deep)	%with Aquatic Plants	Total Acres
< 1/2 acre						
1/2 - 1 acre						
1 - 5 acres						
5 - 10 acres						
> 10 acres						
Seasonal Ponds						
Streams and Rivers	Qty	Average Width	Average Depth	Length	%Natural Shoreline	Ripples?
Streams/Rivers						🗆 Yes 🗖 No
Streams/Rivers						🗆 Yes 🗖 No
Streams/Rivers						🛛 Yes 🗖 No
					Total Acres	

Other	Total Acres
Buildings, roads, parking lots, tennis courts, swimming pool, etc.	
Total Property Acres	

6. Plant and Wildlife Information

Creating an inventory of the plants and wildlife species on your golf course is an excellent way to learn more about the wildlife value of your course. *Please note*. To achieve certification in Wildlife and Habitat Management, you will be required to submit a list of birds and mammals on your course. (See *A Guide to Environmental Stewardship on the Golf Course, 2nd edition* for more information.)

Do you maintain a wildlife inventory all	ready? 🛛 Yes	D No (If yes, please provide	e us with a copy.)
Do you maintain a plant inventory alrea	ady? 🛛 Yes	□ No (lf yes, please provide	e us with a copy.)
Have any of the following been identifi	ed on the prope	rty?		
Endangered species	Species o	r special cor	ncern 🖵	"Problem" plant species
Threatened species	🖵 "Problem	" wildlife sp	ecies	

If you checked any of the above, please list:

7. Supplemental Structures for Wildlife

Supplemental structures for wildlife, such as nest boxes, feeders, and water sources, can enhance your ability to meet the needs of certain wildlife species. Which of the following supplemental structures for wildlife are currently in place?

Shelter

Species Specific	# of Structures	Are they successful?	How often are they monitored? *	Who monitors them?
Bluebirds/ Swallows		□ YES □ NO		
Wrens		□ YES □ NO		
Chickadees/nuthatches/woodpeckers		□ YES □ NO		
Wood ducks		□ YES □ NO		
Purple Martins		□ YES □ NO		
Screech Owls/ kestrels/flickers		□ YES □ NO		
Osprey		□ YES □ NO		
Bats		□ YES □ NO		
Other:		YES NO		

Water	 Brush pile(s) Birdbath(s) Garden Pond(s) Other: 	How many? How many? How many?		 * How often are they monitored? Daily Weekly Bi-Weekly Monthly Once per Season Other (Please describe)
Food	 Bird feeder(s) Other: 	How many?	Seed	_ Suet Hummingbird

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8. Outreach & Education

Letting patrons and the public know that you are involved in the Audubon Cooperative Sanctuary Program and working towards protecting and improving the quality of the environment can lead to valuable support and positive publicity.

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)

Total number of community organizations/experts involved in your environmental or outreach activities:

9. Local Resources: People and Organizations

Please identify resource people and local organizations that can help to plan and implement environmental projects and educational efforts at your course (*e.g.*, golfers, staff, neighbors, state agencies, extension, local environmental groups, watershed organizations, gardening groups). If you would like us to send them general information regarding Audubon International and the ACSP please provide us with their mailing or e-mail address. Make as many additional copies of this page as you need to include all your potential resources.

Name	Title or Relationship to Course	Area of Expertise	Address or e-mail	Send Info?
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO
				□ YES □ NO

10. Additional Information

What do you hope to gain, either for yourself or your golf course, as a result of participating in the ACSP?

What special conditions are required by law/permit that affect the golf course (*e.g.*, endangered species protection, wetland mitigation, pond lining, no pesticide use)?

Are there any pressing local or regional environmental issues or concerns that you feel need to be addressed as part of your participation in the program? What are they?

If there is any controversy surrounding the impacts of building or maintenance of the golf course on the local environment, founded or unfounded, please provide a brief description of the situation. (This information helps us provide you with appropriate recommendations.)

Environmental Plan

Instructions

- The Environmental Plan is divided into six sections-one for each component of the Audubon Cooperative Sanctuary Program. Each section consists of a series of goals and environmental management practices. The management practices listed help to ensure that the goals are achieved. To achieve designation as a Certified Audubon Cooperative Sanctuary, <u>all of the management practices listed must be in place except for those labeled as</u> <u>OPTIONAL</u>. Thus, we ask that you use this opportunity to develop a plan for implementing them.
- 2. In each section, review each management practice and determine whether it is in place at your golf course. Check your response: *Yes, Partially Implemented*, or *No* (A description of each response follows below). Don't labor on each statement. If you're unsure what something means, chances are good that a "Yes" response is not appropriate.
- 3. For each management practice that you check *Partially Implemented* or *No*, fill out the last column *Planned Efforts*. This should include dates and timelines when applicable. Thus, you will plan to incorporate environmental management practices that are not in place or need improvement. These will form the basis for your Environmental Plan.
- 4. The environmental management practices included here apply to almost all golf courses. However, we recognize that many courses have unique circumstances that prevent certain environmental management practices from being implemented. If you believe that a management practice is not applicable to your course, <u>please state why</u> in the space provided under *Planned Efforts*, or make a note at the end of the section. You may also attach additional sheets if needed.
- 5. A space for notes is provided at the end of each section. You may use this space to provide additional details that will help us understand your conservation efforts or to make notes that will help you implement your plan.

A word to beginners

If environmental management is new to you, you may find that you will respond *"No"* or *"Partially Implemented"* to many of the management practices listed in the Environmental Plan. Don't be discouraged. Remember, this is not a test. The Environmental Plan presents a full range of environmental management practices and serves as a way to identify your current strengths, as well as future priorities and areas for improvement.

Responses

YES	Management practice is complete or ongoing. Management practice can be verified.
PARTIAL Partially Implemented	Management practice has been started, but needs further attention and improvement. Fill out the Planned Efforts column.
NO	Management practice is not in place. Fill out the Planned Efforts column.
PLANNED EFFORTS	If the management practice is only partially implemented or not yet begun, please fill out a projected date that you will start the project or management practice and the date that you anticipate completing the project. For management practices that will be ongoing, please indicate a start date and write "ongoing." If you believe that the management practice is not applicable to your course, please state why in the space provided.

Environmental Planning

Purpose: To evaluate, plan, and document environmental management practices that balance the demands of golf with our responsibility to the natural environment. To safeguard the quality of the environment and responsibly care for the land, water, wildlife, and natural resources upon which the course is sustained.

Environmental Management Practices			Partial	No	Planned Efforts Indicate <i>start date</i> and <i>completion date</i> or " <i>ongoing</i> " for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.
Go To eva	a <mark>l 1: Planning</mark> make a commitment to environmental stewardship, plan proj aluate progress toward achieving goals and objectives on a ye	iects early	tha bas	t ens sis.	sure overall environmental quality, and
1.	We have reviewed <i>The Guide to Environmental</i> <i>Stewardship on the Golf Course</i> and understand that this resource will help us to conduct various environmental projects and practices.				
2.	We have started a <i>Resource Advisory Group</i> to help plan and implement environmental projects and educational efforts on the golf course.				
3.	We evaluate progress toward goals and objectives <i>at least</i> once per year.				
4.	We train all employees regarding the importance of environmental performance and specific techniques for ensuring environmental quality.				
5.	We regularly communicate to employees, customers, stakeholders, and community members about environmental goals, issues, project implementation, and progress.				
Goa To	al 2: Documentation document environmental efforts to assist with planning and	track	k pro	ogre.	<i>\$\$.</i>
6.	We regularly take pictures of and around the golf course to document our efforts. (NOTE: See page 32 for more details.)				
7.	We regularly update a list of the wildlife we see or hear on the property. (NOTE: See page 32 for more details.)				
8.	We have created a map of the golf course that illustrates natural areas and buffers. (NOTE: See page 32 for more details.)				
9.	We have established baseline data for representative water bodies and water sources that may be adversely affected by golf course operations. (NOTE: See page 25 for more details.)				
Pel eff	rson(s) responsible for overseeing Environmental Planning orts- please list name(s):				

Notes:

Wildlife and Habitat Management

г

Purpose: To enhance natural areas and landscaping on the golf course to protect and sustain native habitats and the wildlife that depend on them for survival.

Environmental Management Practices			Partial	No	Planned LITORTS Indicate start date and completion date or "ongoing" for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.		
Go a To	Goal 1: General Knowledge To continually expand our general knowledge of the plants, wildlife species, and habitats found on our golf course.						
1.	We have identified core habitats, such as mature woodlands, wetlands, or stream corridors, and special habitat concerns, such as endangered or threatened species, on the property.						
2.	We train staff to understand that management practices may positively enhance or adversely impact wildlife species and habitats on the property.						
3.	We have identified the dominant indigenous (native) plant community and ecological region in which the golf course is located.						
4.	We maintain an on-going written inventory of at least bird and mammal species to document and track wildlife use of the property. Additional inventories may include amphibians, reptiles, fish, and other wildlife, and plants, such as trees, shrubs, and herbaceous species (non-woody plants).						
Go a To	al 2: Wildlife Habitat: Space, Food, Cover, and Water Enhancer improve minimally used and landscaped areas to provide hab	nent itat i	s for a	var	iety of wildlife species.		
5.	We maintain natural wildlife habitat in at least 50‰f all minimally used portions of the property.						
6.	We have connected wildlife habitat areas such as woods, meadows, stream corridors, and ponds to others inside and outside our property boundaries, with corridors of natural vegetation.						
7.	We maintain or plant varying <i>heights</i> and <i>types</i> of plants, from ground cover to shrub and tree layers in habitat areas such as woods, desert, or prairie (<i>e.g.</i> , in woodlands- leave understory, in tall grass areas-maintain grasses and herbaceous plants).						
8.	We leave dead trees standing when they do not pose a safety hazard.						
9.	We maintain a water source for wildlife <i>with aquatic plants</i> and <i>shrubbery or native landscaping along the shoreline</i> (<i>i.e.</i> , not turfgrass). This could be a pond, stream, wetland, or river corridor. On smaller properties, this may also include a birdbath or created "backyard" pool.						
10.	We have naturalized at least 50% of our <i>out-of-play</i> shorelines with emergent-aquatic and shoreline plants. Special attention is given to shallow water areas (<2ft. deep) since wildlife is most abundant when shallow water includes emergent aquatic vegetation.						

Environmental Management Practices	Yes	Partial	No	Planned Efforts
 We choose flowers for gardens or container plants that will provide nectar for hummingbirds or butterflies. 				
12. We maintain nesting boxes or other structures to enhance nesting sites for birds or bats. (OPTIONAL PROJECT)				
Goal 3: Habitat Protection and Biodiversity Conservation To preserve the rich biological diversity of our region by protect landscaping primarily with indigenous (native) plants.	ing e	exist	ing r	native habitats and species, and
 All mitigation projects required by permit have been completed according to law. 				
14. We protect wildlife habitats, and any endangered or threatened wildlife or plant species, from disturbance by golfers and maintenance activities as per law and through buffers, mounted signs, fencing, or designated "environmentally-sensitive zones" (as per USGA rules).				
15. We establish and maintain at least 80‰f the landscaped trees, shrubs, and flowers, excluding turfgrass, with plants that are indigenous to the native plant community of the ecological region of the property.				
16. We purchase landscape plants from locally-grown sources, whenever possible, to support the genetic integrity of local native plant communities.				
17. We avoid disturbing known bird nests or den sites until after young have dispersed. We stake or flag such areas when needed (<i>e.g.</i> , rope killdeer nests; avoid removing shrubs or trees during bird nesting season if nests are present; do not mow fields until after bird nesting season).				
 We have restored degraded habitats, such as eroded slopes, compacted soils, polluted water sources, or areas overrun with invasive exotic species. 				
19. We clean up trash from habitat areas when necessary.				
20. We do our best to confine roads, cart paths, trails, and necessary vegetation removal to the edges of existing habitats to minimize habitat disturbance and fragmentation.				
<i>Person(s) responsible for overseeing Wildlife and Habitat Management efforts- please list name(s):</i>				

Notes:

Chemical Use Reduction and Safety

Purpose: *To ensure safe storage, application, and handling of chemicals and reduce actual and potential environmental contamination associated with chemical use.*

	Environmental Management Practices	Yes	Partial	No	Planned Efforts Indicate <i>start date</i> and <i>completion date</i> or " <i>ongoing</i> " for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.			
Go To pra	Goal 1: General Knowledge <i>To continually expand our knowledge of integrated pest management, chemical use issues, best management practices, and alternative pest control methods.</i>							
1.	We meet all state and OSHA regulations that apply to storage and handling of chemicals used on the property.							
2.	We train all of our key maintenance staff in the basic tenets of integrated pest management, including: (1) scouting and monitoring; (2) selecting thresholds; (3) making decisions based on treatment options; (4) proper timing and spot treatment; (5) documenting and evaluating results.							
3.	We train all of our key maintenance staff to recognize that chemical manufacturing, use, storage, and disposal may pose risks to human health and the environment.							
4.	We train all of our key maintenance staff to understand that poor management practices may adversely impact worker health, on- and off-site water quality, local soil health, and wildlife species and their habitats.							
Go	al 2: Cultural Practices and IPM Techniques							
То	maintain turfgrass in a vigorous and healthy state through so	ound	cult	ural	practices and integrated pest			
ma	nagement techniques.							
5.	We maintain green, tee, and fairway mowing heights at levels that can be reasonably maintained on a day-to-day basis without continually stressing turf or maximizing chemical inputs.							
6.	We have inventoried soil types for all playing surfaces and assessed conditions such as soil structure, nutrient levels, organic content, compaction, and water infiltration.							
7.	We regularly work to improve soil health. This may include: amending organic content, aerating, and improving water infiltration to cultivate a diverse, living biotic soil community.							
8.	Decisions regarding fertilizer applications are based upon soil test information.							
9.	We strive to maximize turf health and minimize resource inputs by improving turf conditions.							
10.	We plant more pest-resistant or stress-tolerant cultivars on playing surfaces and in landscaping. We select plant species/cultivars best suited for our climate, soils, and growing conditions.							
11.	We continually improve and manage plant materials for landscaped areas, gardens, and larger wildlife habitats to maximize health and minimize resource inputs.							

	Environmental Management Practices	Yes	Partial	No	Planned Efforts
12.	We have designated and trained scouts to monitor plant health and pest populations as part of our IPM program.				
13.	We have identified and recorded turf "hot spots" where disease or insect outbreaks first occur. We have also identified other areas where poor growing conditions often lead to problems.				
14.	We use scouting forms to record the type, severity, location, and treatment of pest problems.				
15.	We have established aesthetic and functional thresholds for <i>insects</i> for all managed areas.				
16.	We have established aesthetic and functional thresholds for <i>fungal diseases</i> for all managed areas.				
17.	We have established aesthetic and functional thresholds for <i>weeds</i> for all managed areas.				
18.	We evaluate potential control measures, including alterations in cultural management, biological, physical, and mechanical controls, and chemical methods.				
19.	We consider the environmental impact of pest control measures, <i>e.g</i> , leaching and runoff potential, toxicity to non-target organisms, soil absorption capacity, pesticide persistence, water solubility, effects on soil microorganisms.				
20.	We actively work to reduce turf stresses and change cultural practices or other conditions to prevent or discourage recurrence of problems.				
21.	We maintain records of treatments employed <i>and their effectiveness</i> and use them to guide future pest control decisions.				
Goa To	al 3: Best Management Practices for Chemical Use apply all chemical products in a manner that minimizes harm	ful e	nvira	onm	ental impacts.
22.	Pesticides are applied by a trained, licensed applicator or as directed by law.				
23.	We maintain a current MSDS (Material Safety Data Sheet) for each chemical at our facility.				
24.	When using chemical products, staff always read and follow label directions.				
25.	We apply pesticides only when and where scouting indicates that pest threshold levels have been exceeded.				
26.	We strive to treat problems at the proper time and under the proper weather conditions to maximize effectiveness and minimize harmful environmental impacts.				

Environmental Management Practices	Yes	Partial	No	Planned Efforts
27. We employ practices and use products that reduce the potential for contamination of ground and surface water, <i>e.g.</i> , curtains on application equipment, spoon-feeding, slow-release products, selected natural organic products.				
28. We have eliminated potential chemical runoff and drift by avoiding applications during high winds or prior to heavy rains.				
29. We have established "no spray zones" and buffer areas, particularly around water features and other environmentally sensitive areas. We have communicated these areas via map or site tour to all staff that apply fertilizers or pesticides.				
Goal 4: Communication and Education To ensure that maintenance staff are properly trained and super	rvise	d.		
30. We regularly train and encourage continuing education for maintenance staff, including state licensing, professional association training, and IPM certification. <i>If applicable</i> , we provide non-English speaking employees with training in their native languages.				
31. We communicate with employees and clientele regarding our IPM program to maintain a dialogue regarding thresholds, epidemics, and control measures in relation to environmental quality.				
32. We communicate with the green committee, club manager, and club pro, as appropriate, to coordinate and assure support for needed golf maintenance activities.				
Goal 5: Maintenance Facility and Equipment To ensure that chemicals are properly stored and handled, and e potential for negative environmental impacts.	equip	omer	nt is ,	properly maintained to reduce the
33. We organize our maintenance facility for efficient and proper storage of equipment and supplies.				
34. We properly calibrate all equipment used to apply materials.				
35. We prevent gasoline, motor oil, brake and transmission fluid, solvents, and other chemicals used to operate and maintain equipment and vehicles from contaminating soils, surface waters, or ground water.				
36. When cleaning and maintaining our equipment, water does not directly drain into surface water (<i>e.g.</i> , lake, pond, stream, wetland).				
37. Our chemical storage structure is secure and well ventilated. Personnel access is limited.				
38. We properly store all chemicals. Pesticides and fertilizers are stored on plastic or metal shelving to keep them off the floor.				
39. We store liquid products below dry materials.				

Environmental Management Practices	Yes	Partial	No	Planned Efforts
40. We handle all pesticides over an impermeable surface. A spill containment kit is readily available and spill containment procedures are in place.				
41. We triple rinse, puncture, and properly dispose of empty chemical containers.				
<i>Person(s) responsible for overseeing Chemical Use Reduction and Safety efforts- please list name(s):</i>				

Additional Maintenance Facility Standards

The following maintenance facility specs are considered standard for environmentally-responsible chemical storage and handling. Because they involve *infrastructure* standards, we strongly recommend them to all golf courses, but <u>do not</u> require them for certification in the ACSP for Golf Courses. Use this information to self-audit your maintenance facility, anticipate problems or liability areas, and address concerns.

	Environmental Management Practices	Yes	Partial	No	Planned Efforts
1.	Fuel is stored on an impervious surface that has spill containment and a roof.				
2.	Chemical storage structure is fire proof.				
3.	Explosion proof lights are used in chemical storage and maintenance areas.				
4.	Chemical storage area has a sealed metal or concrete floor, and spills are contained by a sump located near the middle of the floor, and a lip along the edges.				
5.	Grass clippings are blown off equipment with compressed air instead of, or prior to, washing with water.				
6.	A catch basin to collect grass clippings, grease, and oils is installed and maintained.				

Notes:

Water Conservation

Purpose: To ensure adequate water supplies not only for irrigation, but also for the healthy ecological functioning of water bodies, such as rivers, streams, wetlands, lakes, and ponds.

	Environmental Management Practices	Yes	Partial	No	Planned Efforts Indicate <i>start date</i> and <i>completion date</i> or " <i>ongoing</i> " for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.
Goa To	al 1: General Knowledge identify golf course water sources and make a commitm	ent	to ju	dicid	ous and responsible water use.
1.	We train our employees to conserve water and make water conservation a priority in our management approach.				
2.	All of our key maintenance staff are able to identify the water sources used for irrigation and drinking water.				
3.	Our course superintendent and irrigation technicians have been trained and know how to correctly operate and manage the irrigation system.				
Go a To	al 2: Water Conservation: Retention Structures, Irrigation maintain irrigation equipment for maximum efficiency a	n Eq nd n	uipm ninin	<mark>nent,</mark> na/ и	and Plumbing Fixtures vater waste.
4.	There is no uncontrolled release of water out of water retention structures.				
5.	Our irrigation system is properly designed, correctly installed, and performance has been tested.				
6.	We check our irrigation system for proper water distribution in all irrigated areas at least once per year.				
7.	We adjust rotation speed and operating pressure to match sprinkler spacing to nozzle performance.				
8.	We check all irrigation equipment daily and regularly maintain the system on a regular schedule.				
9.	We fix leaks in a timely manner.				
10.	We have eliminated all non-target watering (<i>e.g.</i> , side walks, ponds, habitat areas).				
11.	Our pump station is regularly maintained and is working efficiently.				
12.	We have upgraded our irrigation system, or components of our system (<i>e.g.,</i> valves, sprinkler heads, nozzles, computer software), to reduce inefficiency and malfunction and reduce water use.				
13.	We have installed part-circle irrigation heads where possible to save water.				

	Environmental Management Practices	Yes	Partial	No	Planned Efforts
Goa To ii min	3: Water Conservation: Watering Practices and Turf Care mplement water conservation practices. To maintain soil and turf i imizes water loss to evaporation and runoff.	healt	h th	at m	aximizes water absorption and
14.	We incorporate evapotranspiration rates or weather data into our daily irrigation decisions.				
15.	We avoid running our irrigation system at peak evapotranspiration times.				
16.	We water "hot spots" to target needed areas only, rather than running the entire irrigation system during the peak of the day.				
17.	We work to maintain an effective water cycle to maximize water absorption and reduce runoff and evaporation, including: maintaining soil cover, improving soil structure, adding or maintaining natural organic matter in the soil, and improving drainage to minimize runoff and maximize water penetration through soil layers.				
18.	We have reduced or eliminated irrigation on all unused or minimally used portions of the property.				
19.	We monitor daily water use, tally monthly usage, and set targets for yearly improvement.				
20.	The turfgrass on our greens, tees, and fairways is appropriate for our local climate and growing conditions.				
Per: plea	son(s) responsible for overseeing Water Conservation efforts- se list name(s):		1	<u> </u>	1

Notes:

Water Quality Management

Purpose: To ensure clean water supplies and protect the health and integrity of water bodies, such as oceans, rivers, streams, wetlands, lakes, ponds, and aquifers.

	Environmental Management Practices	Yes	Partial	No	Planned Efforts Indicate <i>start date</i> and <i>completion date</i> or " <i>ongoing</i> " for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.
Goa To I cou	I <mark>l 1: General Knowledge</mark> improve our general knowledge regarding water quality pro urse management, chemical storage and use, and equipment	tecti ' mai	ion a inter	nd p nanc	pollution prevention as it relates to golf e.
1.	Protecting water quality both on and off the golf course is a management priority. All of our key maintenance staff are trained regarding water quality concerns and priority given to pollution prevention.				
2.	All of our key maintenance staff <i>(e.g.,</i> superintendent, assistant superintendent, crew foreman, irrigation technician, chemical spray technician) are able to identify the specific <i>watershed</i> in which the property is located.				
3.	All key maintenance staff are able to identify where wastewater and runoff go after leaving the property.				
Goa To che	Il 2: Best Management Practices (BMP) employ best management practices or structural controls no mical runoff, nutrient loading, erosion, and drift.	ear a	all w	ater	bodies to eliminate the potential for
4.	We have eliminated/mitigated erosion to water bodies such as streams, lakes, and ponds.				
5.	We employ more environmentally-sensitive plant management techniques within 25 ft. of all water bodies and well heads to minimize nutrient and chemical inputs.				
6.	We prevent fertilizers, pesticides, lawn clippings, soil and other landscaping materials from collecting on and running off impervious surfaces.				
7.	We have eliminated potential chemical runoff and drift near all water bodies by designating "no spray" zones, using spot treatments, increasing thresholds for pest problems, using covered booms, and taking the weather into account prior to application.				
8.	Where shorelines are in play, we raise the mowing height along the water's edge to slow and filter runoff. (Research has shown that, on a slight slope, a 25 ft. buffer of 3 inch turf provides filtering benefits.)				
9.	We reduce the potential for nutrient loading to water bodies, such as streams, lakes, and ponds, by employing BMPs such as: using slow-release fertilizers, spoon- feeding, filtering drainage through vegetative or mechanical filters prior to entering water bodies.				
10.	We calibrate and adjust fertilizer and pesticide equipment to prevent misapplication.				
11.	We maintain and clean maintenance equipment in a manner that eliminates the potential for on-site or off-site contamination of water bodies.				

Environmental Management Practices	Yes	Partial	No	Planned Efforts
 We store all chemicals in a manner that eliminates the potential for on-site or off-site contamination of water bodies. Proper spill containment is in place. 				
13. We mix/load pesticides in an area that guarantees spill containment.				
14. We handle and apply fertilizers, pesticides, and other chemicals in a manner that eliminates potential on-site or off-site contamination of water bodies.				
15. We dispose of all chemical containers and all waste materials in a manner that eliminates the potential for on-site or off-site contamination of water bodies.				
16. We reduce/eliminate the need for chemical algae control in ponds through proper aeration, nutrient reduction, bio- filters, vegetation management, or bio-controls.				
17. When aquatic weed management is required, we seek a physical solution (<i>e.g.</i> , hand removal) first, and then seek the least toxic method of chemical weed control. We also address any underlying causes of the problem.				
Goal 3: Water Quality Management: Monitoring To visually and objectively monitor the health of water feature correct problems as needed.	s to	dete	oct in	npaired water quality, identify causes, and
18. We visually monitor water bodies for water quality problems, such as erosion, algae, aquatic "weed" growth, fish kills, sediment buildup, <i>etc.</i> , as part of regular IPM scouting activities.				
 We report water quality problems immediately to supervisors and, if required, regulatory agencies for appropriate action. 				
 20. We have established baseline data for representative water bodies and water sources that may be adversely affected by golf course operations. Testing practices include: a.) If there is a creek/stream/river that flows through the golf course, water is tested where water enters and exits the property. b.) Physical characteristics: dissolved oxygen, pH, temperature, and specific conductivity. c.) Nutrients- nitrogen (nitrate and ammonia) and total phosphorus. * d.) Macroinvertebrates- surveys for aquatic organisms to determine water quality in streams. * e.) Baseline tests conducted 4x/year for at least a year. f.) Re-test water sources at least one time per year, or 				
21. We keep written records of monitoring activities, results, and control measures taken if needed.				
<i>Person(s) responsible for overseeing Water Quality Management efforts- please list name(s):</i>				

* Test creeks/streams/rivers for dissolved oxygen, pH, temperature, and specific conductivity. In addition, testing for either nutrients OR macroinvertebrates must be conducted. All irrigation sources must be tested for nutrients.

Notes:

Outreach and Education

Purpose: To ensure ongoing support for stewardship initiatives, strengthen local community connections, and extend participation in environmental conservation activities.

	Environmental Management Practices	Yes	Partial	No	Planned Efforts Indicate <i>start date</i> and <i>completion date</i> or " <i>ongoing</i> " for projects that are only partially implemented or not yet begun. Explain practices that are not applicable here.
Goa To act	al 1: General Knowledge improve our ability to communicate our commitment to env ivities.	riron	men	tal s	tewardship and implement conservation
1.	We have contacted at least one member of the local community or one community organization (not affiliated with the golf course) to participate in our project planning or implementation.				
2.	We have formed a <i>Resource Advisory Group</i> to help plan and implement environmental projects and educational efforts on the golf course.				
3.	We provide all <i>Resource Advisory Group</i> members with information regarding Audubon International and the Audubon Cooperative Sanctuary Program.				
4.	We communicate our environmental goals, objectives, and projects to patrons, staff, decision makers, and community members.				
Goa To pro	al 2: Outreach and Involvement provide opportunities for patrons, staff, decision makers, an jects on the golf course.	od co	mm	unit	y members to contribute to environmental
5.	We invite employees, patrons, and community members to be involved in our <i>Resource Advisory Group</i> .				
6.	We invite employees, patrons, and community members to help with stewardship projects. We provide <u>at least</u> <u>two</u> of the following activities to encourage participation:				
	• Mounting or monitoring nest boxes with community assistance.				
	• Helping with wildlife gardens projects.				
	• Helping with ecological restoration projects.				
	Inventorying wildlife species.				
	• Maintaining or using a nature trail.				
	 Providing a hole-by-hole guide to environmental stewardship. 				
	• Hosting wildlife walks on or around the golf course.				
	Hosting tours of the golf course for patrons, staff, or groups to showcase different stowardship projects				
	 Hosting tournaments to support environmental 				
	stewardship projects.				
	Hosting workshops on stewardship projects or				
	 environmental issues. Providing information to patrons, staff, decision 				
	makers, and community members on Audubon				
	International's Treasuring Home Initiative.				
	 Sponsoring a local school's involvement in the Audubon Partners for Environment 				
L	• Other:				

Environmental Management Practices	Yes	Partial	oN	Planned Efforts
Goal 3: Education <i>To educate patrons, staff, decision makers, and community me</i>	mbe	rs al	bout	programs and projects on the golf course

which improve environmental quality.	, , , , ,
7. We maintain a display that describes our involvement in the ACSP and highlights stewardship projects taking place on the course.	
8. We have written materials available to patrons that describe our involvement in the ACSP or highlight different stewardship projects taking place on the course (<i>e.g.</i> , brochures, regular newsletter articles, signs, posters, yardage book, Audubon Newsletter, scorecard).	
9. We communicate with neighboring property owners, home owners association, or key community contacts to explain our involvement in the ACSP and various stewardship projects (<i>e.g.</i> , letters to neighbors; press releases; presentations at workshops, seminars, committee meetings).	
<i>Person(s) responsible for overseeing Outreach and Education efforts- please list name(s):</i>	

Notes:

Statement of Support

Our participation in the Audubon Cooperative Sanctuary Program and our Environmental Plan balance the demands of golf with our responsibility to the natural environment.

We seek to safeguard the quality of the environment and responsibly care for the land, water, wildlife, and natural resources upon which our course is sustained.

We are committed to implementing management practices and projects to achieve the purposes and goals written in our Environmental Plan.

Name Super	of Golf Course intendent, Cou	e: urse Manager, or Course Contact	t Person			
	Printed Name	e:		_		
	Signed:			Date:		
Greer	n Committee Cl	hair, President, Club Manager, or	r Owner			
	Printed Name	e:				
	Address:					
		Street Address/PO Box	City	State	Zip Code	
	Phone:		E-mail:			
	Signed:			Date:		

Individual Recognition in Environmental Planning- I affirm that I was principally responsible for completing the *Site Assessment and Environmental Plan*.

This individual will be recognized for achievement in Environmental Planning.

Please print	name	
Please sign		
	Audubon	
	International	

Please make copies for your records. Provide one copy to each individual who signed above, keep the original for your records.

Audubon Cooperative Sanctuary Program for Golf Courses

Action Implementing Your Plan



120 Defreest Dr. Troy, NY 12180 (518) 767-9051

Step 2: Action

Introduction

Once you have developed your environmental plan, it's time to take action. Review and highlight items in your environmental plan that are only <u>partially implemented</u> or <u>not in place</u>. These are the management practices or projects that you should focus attention on. Follow your timeline to implement and maintain stewardship projects.

Where do I get more information about how to implement projects?

- Review A Guide to Environmental Stewardship on the Golf Course, 2nd edition for instructions on how to carry out specific projects.
- Visit Audubon International's Web site and search through the many fact sheets and case studies available.
- Every two months you will receive our newsletter, *Stewardship News.* This publication highlights member accomplishments and offers ongoing project ideas and information.
- If at any time you have questions or need assistance, you can contact Audubon International staff via mail, phone, fax, or e-mail.

Where else can I go for help?

Many sources of expert advice and support are no further away than your local community. Draw upon resources such as local environmental and community organizations, college or university staff and students, cooperative extension services, golfers, and your own professional association.

If you haven't already, gather a group of people who can help you implement projects or provide you with technical advice along the way. Forming a **Resource Advisory Group** is discussed in *A Guide to Environmental Stewardship on the Golf Course, 2nd edition.*

What documentation can I begin to compile now for certification?

As you develop your Environmental Plan and begin to implement it, there are a variety of ways to document your activities. This documentation is needed to show us what you have done and to achieve designation as a *Certified Audubon Cooperative Sanctuary*. It is also beneficial in communicating your stewardship efforts to employees, members, and the public.

Review the list on the following page and begin to compile these items:

- Wildlife Inventory
- Photographs
- Property Map
- Integrated Pest Management Records
- Water Quality Test Results

How to reach us:					
phone:	518-767-9051 ext. 100				
e-mail:	acsp@auduboninternational.org				
web site:	www. auduboninternational.org				
mail:	Audubon International				
	120 Defreest Drive				
	Troy, NY 12180				
fax:	518-767-9076				

Compile these items as you implement projects:

□ <u>Wildlife Inventory</u>

Compile a list of the mammals and birds you have seen or heard on the property. There is a checklist provided in the Wildlife and Habitat Management section of *A Guide to Environmental Stewardship on the Golf Course, 2nd edition.* This list will be required documentation for certification in *Wildlife and Habitat Management*. Though not required, you may also choose to compile a list of reptiles and amphibians, plants, or other species. These lists also provide excellent documentation of your habitat enhancement efforts.

□ <u>Photographs</u>

Take photos or slides to document what you are doing. These should include:

- 1. Natural areas, such as representative woods, wetlands, ponds, and gardens.
- 2. Maintenance facility, including: pesticide storage, mix and load areas, and equipment wash areas.
- 3. Representative water features.
- 4. Outreach and education activities- take photos of people in action implementing projects, resource committee members or meetings, tours if you host them, and your display.
- 5. *Before* and *After* photos of project work.

<u>Please note</u>: Photographs, slides, and digital images submitted with certification requests become the property of Audubon International and may be used in publications, presentations, or Web sites. If you would like us to list the photographer, rather than the golf course, when crediting photos, please clearly label the back of the photographs and include pertinent information along with digital images.

□ Property Map

When you apply for certification in *Wildlife and Habitat Management*, you will be required to send us a map of the golf course that clearly shows various landscape features. Though there is no particular size requirement for your map, we recommend keeping it to 8-1/2 x 14 inches-or, if your course is quite large, make one 8-1/2 x 14 inch map per each nine holes of golf. Digital maps of your golf course are easy to access through an internet search engine, such as Google, and some programs, such as Scribble Maps (<u>http://scribblemaps.com</u>), also allow you to draw on the map and share it with others. You can also do this by photocopying and reducing an existing course map, such as an irrigation map. If you have a scorecard that depicts an accurate layout, you may be able to photocopy and enlarge it to use as your reference map. Many superintendents have found it useful to prepare their map when developing their environmental plan. The map will prove a useful management tool to guide your efforts. <u>Refer to the sample map on page 44</u>.

Label the map of the golf course with the following features:

- 1. Overall layout of the course, with golf holes labeled;
- 2. All natural plant communities. Be sure to mark woods, meadows, gardens, wetlands, and other natural features clearly;
- 3. Water bodies, such as ponds, lakes, wetlands, and streams. Label shorelines where you maintain naturalized vegetation;
- 4. "No spray" and "Low-intensity management" zones that you have designated to protect sensitive habitats or water bodies.

□ Integrated Pest Management Records

The certification section on *Chemical Use Reduction and Safety* includes four reference tables to help you easily describe various aspects of your IPM program. If you wish, review the tables now so that you are familiar with the type of information we'll be requesting for certification.

□ Water Quality Test Results

Since baseline water quality testing is required for certification in *Water Quality Management*, you will need to send us a copy of test results for at least one round of testing. Please note: analyzing the results of the tests is up to you and whomever you work with to conduct the tests. If you need help in this area, please refer to the Water Quality Management section of *A Guide to Environmental Stewardship on the Golf Course, 2nd edition.*

Audubon Cooperative Sanctuary Program for Golf Courses

Documentation Submitting Documentation & Achieving Certification



120 Defreest Dr. Troy, NY 12180 (518) 767-9051

Step 3: Documentation

Introduction

Once your environmental program has been implemented, the next step is to document your efforts. Documentation will help you to evaluate and communicate the success of your environmental management program and achieve certification.

Equally important, documenting what you have done will contribute to a growing body of significant information on golf and the environment. This information is used to promote the positive environmental efforts of superintendents. It also provides support, encouragement, and new ideas for others who are beginning or expanding environmental management practices.

What is required to achieve certification?

Achieving certification is not necessarily difficult or time consuming, but it does require that you submit information to verify your accomplishments. For each component of the program, we have provided a simple form for you to fill out. In addition, back-up documentation such as photographs, records, or a map may be requested to illustrate your stewardship activities. We hope that you will find that these documents also serve as a useful management guide for you, your staff, and future property managers.

Can we submit requests one at a time?

Yes! In fact, this is often the easiest way to do it. They do not need to be submitted in any particular order, either. Focus on one component at a time and take certification in small "chunks." Add a few new management practices each year, and build upon your successes. Of course, you are also welcome to submit all Requests for Certification at once.

What happens when my course achieves certification?

Upon certification, your course will receive a Certified Audubon Cooperative Sanctuary art print for display, a cameraready logo, and a press release. You will also have the opportunity to participate in special projects and promotional efforts designed for certified properties.

Once the course achieves certification, Audubon International also awards a *Certificate of Recognition in Environmental Stewardship* to the individual who was principally responsible for completing all certification components. This recognition is awarded only when an individual spearheads certification from environment planning to completion at a single golf course.

How long does certified status last?

You will be expected to update us about your progress in each component of the program every three years. Recertification helps us to ensure that certification standards are being maintained and further promote your efforts. A recertification packet will be sent every three years after the course has been designated as a Certified Audubon Cooperative Sanctuary.

Please Note:

You must achieve certification in <u>Environmental Planning</u> prior to requesting certification in other program components. Refer to <u>Step 1:</u> <u>Planning</u> if you have not completed this step.

Certification Instructions

How do I know if I'm ready to submit for certification?

- 1. Review the *Site Assessment and Environmental Plan* that you filled out when you first joined the Audubon Cooperative Sanctuary Program. As you review each component of your plan, evaluate whether you have achieved the stated goals. Have you implemented the environmental management practices that you outlined?
- 2. Compare your responses now with how you responded when you first filled out your Environmental Plan. How have you improved or expanded environmental management practices?

To achieve certification, we expect that a golf course will have met all of the goals and implemented each environmental management practice outlined in the Environmental Plan. Only those projects that the golf course and Audubon International agreed were "not applicable" do not need to be implemented.

I think I am ready. Now what?

- When you have met all of the goals for a certification component, for example, *Water Conservation*, go to the "Certification Request Form" for that section and fill it out. Sign the *Statement of Affirmation* that you have met the goals outlined in your Environmental Plan, and then proceed to compile the subsequent backup documentation. You may apply for certification in one component at a time, or send all components at once. If you would like to receive an electronic copy of the forms, please let us know and we will e-mail them to you.
- 2. Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials:
 - i. E-mail scan or fillable PDF of this document, and all supporting documents to: acsp@auduboninternational.org
 - ii. Audubon International Dropbox: www.dropbox.com
 - a. Login Émail:
 - files@auduboninternational.org b. Login Password: audubon123



- c. Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)
- d. Email us at acsp@auduboninternational.org to alert us that you added files to the dropbox
- iii. Submit via USB Drive to:
 - 1. 120 Defreest Dr, Troy, NY 12180
- 3. If our staff has a concern related to some aspect of your certification request, we will contact you in writing or via phone to discuss it. Together, we will determine the most appropriate way to proceed to help you complete what is needed.
- 4. Case Study We also require that you complete <u>one</u> Case Study Form to provide more detailed information about a project you've implemented. You may choose a project in any component of the program and submit your Case Study at any time up to when you submit your last component for certification. A Case Study Form is provided with the Certification Request Forms.
- 5. If you have included all necessary information and met the certification requirements for a particular component, your course will receive a *Certificate of Achievement* for that component. Once you have achieved certificates in all components of the program, provided us with a case study, and hosted a successful site visit by Audubon International staff, your course will be designated as a *Certified Audubon Cooperative Sanctuary*. The person responsible for spearheading the certification effort will also receive formal recognition via a personal *Certificate of Recognition in Environmental Stewardship*.

Questions?

Please call or e-mail us with any questions regarding applying for certification. We'd be glad to discuss projects you have undertaken, how much information to include, or any other concerns you have. You can reach us Monday to Friday, 9 a.m. to 5 p.m. (EST).

Phone: 518-767-9051 e-mail: acsp@auduboninternational.org



ENVIRONMENTAL CASE STUDY

Project Title:		
Property Name:	 	
Location (City/State):		
Project Coordinator (name and title):		
Phone Number:		
E-mail:		

PROJECT DESCRIPTION

Give an overview of the project. Why did you choose it? What were conditions like before and after implementing the project?

GOALS *Please list your goals for the project:*

IMPLEMENTATION & MAINTENANCE

What specific steps did you take to implement it? What kind of on-going maintenance does it require? Please give sufficient detail so that someone interested in duplicating this project could do so.

RESULTS

Describe the results you achieved. What were the environmental benefits? Please be as specific as possible about any tangible results (e.g., number of acres naturalized, new species observed, increase in habitat acreage, number of birds fledged from nest boxes, number of gallons of water saved, acres taken out of intensive management, increase or decrease in man-hours needed to maintain, increase or decrease in equipment wear and tear).

GOLFER/EMPLOYEE RESPONSE

How did golfers respond to the project? How did you communicate about your actions?

PERSPECTIVE AND RECOMMENDATIONS

What, if anything, would you do differently if you were to do the project again? What would you recommend to others implementing this project?

ECONOMIC COSTS & BENEFITS

What v	vas th	e fundir	ng sourc	e for thi	s project?
How m	uch d	id it cos	t to imp	lement t	his project?
What a	ire you	ur antic	ipated o	or actual	financial savings?
OTHER Are you y project?	willing ロ	to take YES	e calls fr	om othe NO	r Audubon International participants, organizations, or media regarding this
Do you h	ave pł	notos av YES	vailableî	? NO	(We are especially interested in before and after photographs.)

Date Submitted: _____

Please upload completed Environmental Case Study and photographs or other backup documentation to DropBox or email them to <u>acsp@auduboninternational.org</u>, or mail a USB drive to: Audubon Cooperative Sanctuary Program, 120 Defreest Drive, Troy, NY 12180
ENVIRONMENTAL



Project Title:	Wildlife Garden for Hummingbirds, Butterflies, Songbirds
Property Name:	Pine Crest Golf Club
Location (City/State):	Albany, New York
Project Coordinator (name and title):	Jack Cardiff, CGCS, Superintendent
Phone Number:	518-767-9051
E-mail:	acsp@auduboninternational·org

PROJECT DESCRIPTION

Give an overview of the project. Why did you choose it? What were conditions like before and after implementing the project?

We have numerous annual and perennial gardens around the clubhouse and golf course and we wanted to plant them with native plant species to provide food sources for hummingbirds, butterflies, and songbirds. Our course does not have much room to naturalize, so this seemed like a good way to enhance habitat without changing the playability of the course.

GOALS

Please list your goals for the project:

- 1. Enhance overall wildlife habitat for desirable species by providing nectar sources, host plants, and other food sources.
- 2. Attract wildlife to places where golfers could enjoy seeing them up close and subtly encourage support for our wildlife enhancement program at the course.

IMPLEMENTATION & MAINTENANCE

What specific steps did you take to implement it? What kind of on-going maintenance will it require? Please give sufficient detail so that someone interested in duplicating this project could do so.

We reviewed our list of plants that attract hummingbirds, butterflies, and songbirds and compared it with our current garden plants. Though there was some crossover between the two, many of our typical plantings had no real wildlife value. We then selected plants from the wildlife list that we thought would grow well given our site conditions. We also chose some host plants for butterflies. In the spring, we purchased our selected plants at a local nursery and through a mail-order company, and planted the desired annuals and perennials. This wasn't too difficult since we already plant these areas. In addition, we added a hummingbird feeder to our garden by the clubhouse and one by the half-way house. We also added a few "sunning stones" for butterflies, and a bird feeder by the clubhouse garden. The feeders supplement the plantings and give a stronger focus to the gardens, *i*e; they *look like* gardens designed for wildlife. The gardens won't take more maintenance than before: occasional weeding, dead-heading of flowers, cutting back in the fall, plus regular filling of the feeders.

RESULTS

Describe the results you achieved. What were the environmental benefits? Please be as specific as possible about any tangible results (e.g., number of acres naturalized, new species observed, increase in habitat acreage, number of birds fledged from nest boxes, number of gallons of water saved, acres taken out of intensive management, increase or decrease in man-hours needed to maintain, increase or decrease in equipment wear and tear).

We have seen far more butterflies in our gardens than ever before and members report seeing hummingbirds often feeding on the flowers and at the feeder. We are also showcasing some of our regionally native plants instead of just planting typical garden flowers. We think the project has been a success. Total area converted from traditional to wildlife garden is about 400 square feet.

GOLFER/EMPLOYEE RESPONSE

How did golfers respond to the project? How did you communicate about your actions?

Golfers seemed to like the new garden design and we received many favorable comments. We informed people about our wildlife gardens through a newsletter article.

PERSPECTIVE AND RECOMMENDATIONS

What, if anything, would you do differently if you were to do the project again? What would you recommend to others implementing this project?

This is an easy project to do and we would highly recommend it \cdot Next year, we plan to create a simple pamphlet to describe our efforts and list the plants we've chosen \cdot We hope this will further pique our member's interest in our wildlife and habitat enhancement efforts.

ECONOMIC COSTS & BENEFITS

What was the funding source for this project?	none needed		
How much did it cost to implement this project?	no additional cost over regular garden maintenance		
What are your anticipated or actual financial savings?	none		

OTHER

Are you willing to take calls from other Audubon International participants, organizations, or media regarding this project?

🗷 YES 🗖 NO

NO (We are especially interested in before and after photographs.)

Date Submitted: <u>1/10/04</u>

Certification Request Form Wildlife and Habitat Management



Golf Course Name		
Address		
Contact Person		
Telephone/E-mail		

1. Statement of Affirmation

Review the Wildlife and Habitat Management portion of your Environmental Plan. If all required projects are in place or ongoing, check each of the following and sign below to verify that you have met these goals by implementing all environmental management practices as outlined in your plan.

"I affirm that we have achieved the following goals and have completed all projects outlined in our environmental plan."

Overall Purpose:

□ We have enhanced natural areas and landscaping on the golf course to protect and sustain native habitats and the wildlife that depend on them for survival.

Goals:

- I. General Knowledge- We continually expand our general knowledge of the plants, wildlife species, and habitats found on our golf course. (Environmental Plan: Wildlife and Habitat Management Section: Items 1-4, page 16)
- 2. Wildlife Habitat: Space, Food, Cover, and Water Enhancements- We have improved minimally used and landscaped areas to provide habitat for a variety of wildlife species. (Environmental Plan: Wildlife and Habitat Management Section: Items 5-12, pages 16-17)
- 3. Habitat Protection and Biodiversity Conservation- We preserve the rich biological diversity of our region by protecting existing native habitats and species, and landscaping primarily with indigenous (native) plants. (Environmental Plan: Wildlife and Habitat Management Section: Items 13-20, page 17)

Signed: _____

Date:

2. Course Accomplishments

Since joining and participating in the ACSP...

Wildlife Habitat: Space, Food, Cover, and Water Enhancements		
 Have you added gardens for birds/wildlife/native pollinators to the property? How many? 	□ YES	□ NO
 Have you decreased the amount of managed turfgrass on the property? If so, by how many acres? 	U YES	□ NO
	Before:	After:
3. Estimate how many acres of natural land are protected from disturbance.		
4. Considering the total length of non-play shoreline for all water features on the golf course property, what percentage of that shoreline is naturalized? (<i>Note: Naturalized means areas where native vegetation is encouraged to support wildlife habitat and maintenance is minimized.</i>)		
5. What percentage of <i>total</i> lake/pond/stream shoreline is naturalized?		
Habitat Protection and Biodiversity Conservation		
6. Have you removed exotic invasive plants?	YES	□ NO
What species?		
7. Have you implemented any ecological restoration projects? What type of restoration?	□ YES	□ NO
How many acres were involved?		
Who helped you with this project?		
	Before:	After:
8. Do you choose native plants when landscaping?	U YES	U YES
Whet according of lands and there also have flowers and measure (available a		
turfgrass) are native to your ecological region?		
9. If your course property has forested areas, how many acres of that forest include understory (<i>i.e.,</i> shrubs, young trees, herbaceous plants, and leaf litter)?		

3. Core Habitat Management Information

Please fill out the chart on page 43 regarding how you manage core habitat areas. Core habitat areas should include all large blocks of natural area on the property that provide significant wildlife habitat (*e.g.,* woods, prairie or meadow, wetland, desert). Make as many additional blank copies of the chart as you need to include all your core habitat areas.

4. Back-up Documentation

Photographs

Please submit images of the following (we accept photographs, slides, and high quality digital images):

- Representative natural habitats
- Gardens with hummingbird/butterfly/songbird plants
- Representative water features
- Nest boxes and other supplemental structures, such as feeders, brush piles, *etc.*
- Before/after pictures of projects or restored degraded habitats
- Habitat signs or "Environmentally Sensitive Zone" signs

□ Wildlife Inventory

Include at least bird and mammal species. Use the bird inventory form provided within A Guide to Environmental Stewardship on the Golf Course, 2nd edition, *or include your own checklist.*

Golf Course Map

Label a map of the golf course with the following features:

- 1. Overall layout of the course with golf holes labeled;
- 2. All natural habitats. Be sure to mark woods, meadows, gardens, wetlands, and other natural features clearly;
- 3. Water bodies, such as ponds, lakes, wetlands, and streams. Label shorelines where you maintain naturalized vegetation;
- 4. "No spray" and "Low-intensity management" zones that you have designated to protect sensitive habitats or water bodies;
- 5. Supplemental structures for wildlife, such as nest boxes, feeders, or brush piles.

Though there is no particular size requirement for your map, we recommend keeping your map to 8-1/2 x 14 inches–or, if your course is quite large, make one 8-1/2 x 14 inch map per each nine holes of golf. You can do this by photocopying and reducing an existing course map, such as an irrigation map. If you have a scorecard that depicts an accurate layout, you may be able to photocopy and enlarge it to use as your reference map.

5. Results and Successes

Please describe the overall results and successes of your wildlife and habitat management projects.

6. Ongoing Issues

Please describe any unresolved, ongoing, or new issues or problems related to Wildlife and Habitat Management on the golf course that we can help you with.

Wildlife and Habitat Management Core Habitat Management Information

Core Habitat Area*	Acres	s Management Approach				
		🗵 "Low-intensity" maintenance approach				
Frample		Mounted signs or designated "Environmentally Sensitive Zones" to protect from				
Example.		disturbance				
		Maintain native plants, such as trees, shrubs, and herbaceous (non-woody) species.				
Tall arass area	3	🗵 Remove invasive exotic plants as needed.				
	-	Maintain diverse layers of vegetation				
between hole #5	acres	Connect to other habitat areas via corridors				
and #6		Confine paths, trails, and necessary vegetation removal to edges of the habitat				
		area.				
		I Other: please attach notes to explain prescribed hurn once per year				
		"I ow-intensity" maintenance approach				
		Mounted signs or designated "Environmentally Sensitive Zenes" to protect from				
		disturbanco				
		\square Maintain native plants such as trees, shrubs, and berbaceous (non-woody) species				
		\square Remove invasive evolution lengts as needed.				
	\square Maintain diverse layers of vegetation					
		\square Connect to other babitat areas via corridors				
		\Box Confine paths, trails, and pocessary vogetation removal to edges of the babitat				
		aroa				
		area.				
		Uner: please allaci notes to explain				
		Mounted signs or designated "Environmentally Sensitive Zenes" to protect from				
		disturbanco				
		\square Maintain pativo planto, such as troos, shrubs, and horbaceous (pon-woody) species				
		D Pomovo invasivo ovotic plants, su poodod				
		\square Maintain diverse layers of vegetation				
		Connect to other babitat areas via corridors				
		\square Confine paths, trails, and percentary vegetation removal to edges of the babitat				
		D Other: please attach notes to explain				
		Uner: please attach hotes to explain I ow-intensity" maintenance approach				
		Mounted signs or designated "Environmentally Sensitive Zenes" to protect from				
		disturbance				
		\square Maintain native plants such as trees shrubs and berbaceous (non-woody) species				
		\square Remove invasive evotic plants, such as needed				
		A Maintain diverse lavers of venetation				
		Connect to other habitat areas via corridors				
		\square Confine naths trails and necessary vegetation removal to edges of the babitat				
		area				
		Other: please attach notes to explain				
		"I ow-intensity" maintenance approach				
		Mounted signs or designated "Environmentally Sensitive Zones" to protect from				
		disturbance				
		Advintain native plants, such as trees, shrubs, and herbaceous (non-woody) species.				
		Remove invasive exotic plants as needed.				
		Maintain diverse lavers of vegetation				
		Connect to other habitat areas via corridors				
		Confine paths, trails, and necessary vegetation removal to edges of the habitat				
		area.				
		Other: please attach notes to explain				
KCara habitat araaa aha	المانة مايي					

*Core habitat areas should include all large blocks of natural area on the property that provide significant wildlife habitat, e.g., wood, prairie or meadow, wetland, desert. Make additional copies of this chart as needed.



Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials electronically:

- 1. E-mail scan or fillable PDF of this document, and all supporting documents to: acsp@auduboninternational.org
- 2. Audubon International Dropbox: <u>www.dropbox.com</u>



Login Email: <u>files@auduboninternational.org</u> Login Password: audubon123

- Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)
- Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox 3. Submit via USB Drive to:
 - 120 Defreest Dr, Troy, NY 12180

Certification Request Form Chemical Use Reduction & Safety



Golf Course Name		
Address		
Contact Person		
Telephone/E-mail		

1. Statement of Affirmation

After reviewing the Chemical Use Reduction and Safety portion of your Environmental Plan, please check each of the following and sign below to verify that you have met these goals by implementing all environmental management practices as outlined in your plan.

"I affirm that we have achieved the following goals and have completed all projects outlined in our environmental plan."

Overall Purpose:

□ We have ensured safe storage, application, and handling of chemicals and reduced actual or potential environmental contamination associated with chemical use.

Goals:

- I. General Knowledge-We continually expand our knowledge of integrated pest management, chemical use issues, best management practices, and alternative pest control methods. (Environmental Plan: Chemical Use Reduction and Safety Section: Items 1-4, page 18)
- 2. Cultural Practices and Integrated Pest Management- We maintain turfgrass in a vigorous and healthy state through sound cultural practices and integrated pest management techniques. (Environmental Plan: Chemical Use Reduction and Safety Section: Items 5-21, pages 18-19)
- 3. Best Management Practices for Chemical Use- We apply all chemical products in a manner that minimizes harmful environmental impacts. (Environmental Plan: Chemical Use Reduction and Safety Section: Items 22-29, pages 19-20)
- □ 4. Communication and Education- We ensure that maintenance staff are properly trained and supervised. (Environmental Plan: Chemical Use Reduction and Safety Section: Items 30-32, page 20)
- 5. Maintenance Facility and Equipment- We ensure that chemicals are properly stored and handled, and equipment is properly maintained to reduce the potential for negative environmental impacts. (Environmental Plan: Chemical Use Reduction and Safety Section: Items 33-41, page 20-21)

Signed: _____

Date:

2. Course Accomplishments

Since joining and participating in the ACSP...

С	Iltural Practices and Integrated Pest Management		
1.	Have you reduced pesticide usage on your property?	□ YES	□ NO
	By how much? (list posticido as well as amount and/or cost)		
	by now much: (list pesticide as well as amount and/or cost)		
2.	Which of the following have you done to decrease your overall chemical use?	physical remo	val of weeds
	Also list other practices:	biological cont	trols
		mowing progr	am change
		□ rentilizer prog	ram change
		tondressing p	rogram change
		aerification pr	ogram change
		verticutting pr	ogram change
		🗖 maintain scou	ting records
3.	Are you using pesticides with a lower toxicity level now?	S YES	D NO
	If yes, please provide at least one example of a pesticide that you are no longer		
	using and what you have replaced it with:		
Л	Have you reduced fortilizer use?		
4.			
	By how much? (list amount, cost, or, if available, both)		
5.	Have you increased the percentage of slow-release fertilizer used?	🖵 YES	🗖 NO
	What percentage of your fertilizer use is slow release?	Before:	After:
6.	Have you increased the use of natural organic fertilizers?	□ YES	□ NO
	What percentage of your fertilizer use is natural organic?	Before:	After:
7.	Have you reduced the amount of fuel used?	YES	□ NO
	By how much? (list amount, cost, or, if available, both)		
M	aintenance Facility	.	
PI 0	ease answer "yes" or "no" to the following statements:		
0.	navement)?		
	puvementy.		
9.	A spill containment kit is readily available near the mix & load area.	🖵 YES	U YES
		🗖 NO	NO
10	Chemicals are stored in a designated chemical storage building or structure.	□ YES	□ YES
	The base's disk and a base base 's ball disk disk disk a second		
11.	The chemical storage structure is labeled and locked; personnel access is		
12	Fauinment washing and chemical mixing/loading occur on separate		
12	pads/surfaces.		
13	Please check the statement that best describes your equipment wash area:		
	□ Wash water is recycled in a closed-loop system.		
	Wash water drains to city sewer.		
	Other, wash water drains to:		

3. Chemical Use Reduction and Safety Reference Charts

Please fill out the charts on pages 48-50 regarding how you manage landscape areas. Make as many additional blank copies of the chart as you need before filling them out.

4. Back-up Documentation

Photographs

Please submit images of the following (we accept photographs, slides, and high quality digital images):

- Chemical Storage Area, *including* outside and inside
- Chemical Mix And Load Area
- Equipment Storage/General Maintenance Area
- Equipment Wash Area, *including* where water drains
- The location of your MSDS sheet

□ Scouting Records

Please supply us with one example of your scouting records from the last two seasons. Sample scouting reports can be found in *The Guide to Environmental Stewardship on the Golf Course, 2nd edition*.

5. Results and Successes

Please describe the overall results and success of your Chemical Use Reduction and Safety program. What do you feel are your most significant achievements in your program? Have you also identified areas of concern related to your maintenance facility and chemical use that you plan to or would like to address in the future?

Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials:

- 4. E-mail scan or fillable PDF of this document, and all supporting documents to: <u>acsp@auduboninternational.org</u>
- 5. Audubon International Dropbox: <u>www.dropbox.com</u>

Login Email: files@auduboninternational.org



Login Password: audubon123 Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)

Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox 6. Submit via USB Drive to:

120 Defreest Dr, Troy, NY 12180

Chemical Use Reduction and Safety

Aesthetic and Functional Threshold Table

Please state threshold level as the percent of area affected or number of insects/weeds per square foot prior to chemical treatment application. Make additional copies of this chart as needed.

	Pest	Greens	Tees	Fairways	Roughs	How has this decision been reached? (<i>i.e.</i> , aesthetic, functional, economic, environmental)
Diseases Example:	Dollar Spot	5%	10%	30%	untreated	Aesthetic and environmental
Insects Example:	White Grubs	2∕sq∙ft∙	3/sq·ft·	7∕sq∙ft∙	untreated	Functional and environmental
Weeds						
Other (<i>e.g</i> nematodes	a, rodents, s)					

Cultural Practice Reference Table

Cultural Practice	Turf Area	How Often	Time of Year	Rate (pounds/1000 sq. ft.) **
Topdressing				
Aerification				N/A
Verticutting				N/A
Plant Growth Regulator				
Overseeding				
Fans				N/A
Other:				

Fertilizer Reference Table

Turf Area	Fertilizer Type	rtilizer Type Time of ** Year ***		Clippings left?	Rate (pounds/1000 sq. ft./year) *		
					Ν	Р	K
Greens				□ Yes □ No			
Tees				□ Yes □ No			
Fairways				□ Yes □ No			
Rough				□ Yes □ No			
Within 25 feet of water, wetland, or drainage				□ Yes □ No			
Landscaped areas (non- play)				□ Yes □ No			

* www.onlineconversion.com

**** Fertilizer Type:** granular liquid slow release natural organic synthetic

*** Time of Year:

early - spring mid - summe late - fall

- summer
- - winter

**** Application: spoon feeding foliar feeding fertigation

Pesticide Reference Table

Use the following chart to describe your pesticide applications for the previous two years. Include herbicides, insecticides, fungicides, nematicides, and rodenticides. Make additional copies of this chart as needed.

Pest Problem	Playing Surface	Acres	Active Ingredient(s) <u>and</u> Trade Name of	Toxicity Class *	Average qty per vear**	Application Schedule
Example: Pythium	Greens Tees	6	Azoxystrobin Heritage	Caution (or Category III)	2 lbs· ***	Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program
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						Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program
						Curative program Preventative when conditions favor outbreak Scheduled preventative program

Toxicity classes are either listed as Danger, Warning, Caution or I, II, III, or IV - they are designated by the EPA or other regulatory body for your country, and can be found on the pesticide label or the MSDS sheet. *

This can be listed in lbs., gal or other depending on the label's measurement on the product you are working with. If appropriate, indicate whether you are recording total pounds or only active ingredient **

Certification Request Form Water Conservation



Golf Course Name		
Address		
Contact Person		
Telephone/E-mail		

1. Statement of Affirmation

After reviewing the Water Conservation portion of your Environmental Plan, please check each of the following and sign below to verify that you have met these goals by implementing all environmental management practices as outlined in your plan.

"I affirm that we have achieved the following goals and have completed all projects outlined in our environmental plan."

Overall Purpose:

□ We ensure adequate water supplies not only for irrigation, but also for the healthy ecological functioning of water bodies, such as rivers, streams, wetlands, lakes, and ponds.

Goals:

- □ 1. General Knowledge- We have identified golf course water sources and made a commitment to judicious water use. (Environmental Plan: Water Conservation Section: Items 1-3, page 22)
- 2. Irrigation Equipment and Plumbing Fixtures- We maintain irrigation equipment for maximum efficiency and minimal water waste. (Environmental Plan: Water Conservation Section: Items 4-13, page 22)
- 3. Watering Practices and Turf Care- We implement water conservation practices. We maintain soil and turf health that maximizes water absorption and minimizes water loss to evaporation and runoff. (Environmental Plan: Water Conservation Section: Items 14-20, page 23)

Signed: _____

Date:

2. Course Accomplishments

Since joining and participating in the ACSP...

Wa	tering Practices and Turf Care			
1.	Have you reduced water consumption by improving your irrigation system or changing the way water is applied?	□ YES	□ NO	
	If so, by how much? (list amount, cost)			
2.	Which of the following have you done to decrease your overall irrigation use?	 changed soil management program handwatering changed mowing program reduced irrigated acreage installed part-circle heads changed run times installed a weather station adjusted ET replacement rate upgraded irrigation system changed grass type 		
3.	Are evapotranspiration rates incorporated into irrigation decisions? If you use ET rates, what ‰f ET is typically replaced during the growing season?	□ YES	□ NO	
4.	What %is replaced on the average? Have you reduced irrigated acreage?	The Yes	□ NO	
5.	How many acres receive irrigation?	Before:	After:	
6.	Have you incorporated other sources of irrigation water (<i>e.g.,</i> effluent)?	U YES	□ NO	
Wa	ter Retention Structures (e.g., irrigation ponds, aesthetic ponds, stormw	ater retention struct	ures)	
7.	How are man-made structures lined?			
8.	Have you had uncontrolled release of water out of water retention structures?	<i>Before:</i> □ YES	<i>After:</i> □ YES	
	If yes, what steps were/will be taken to mitigate against the loss of water?	⊔ NO	⊔ NO	
Irri	gation Equipment and Plumbing Fixtures			
9.	How do you check the distribution of your system to make sure water goes only where needed?	 visually check/inspoor drainage, po cup method other: 	spect wet/dry spots, onding	
10.	How often do you check distribution?	 1x/year 2x/year Every other year Distribution has r since: 	not been checked _(year)	

- 11. Please describe your irrigation system, including the following information:
 - Manufacturer and model (*e.g.,* Toro VT II, Rainbird Maxi 5)
 - Type of system (*e.g.,* manual, automatic, or computer)
 - Type of head control (*e.g.*, individual, satellite, +-circle)
 - Age of the system
 - Part circles in outlying areas (*e.g.*, around ponds, perimeters):

3. Results and Successes

Please describe how your efforts have been successful and what measures you will employ in the future to expand water conservation.

Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials electronically:

- 7. E-mail scan or fillable PDF of this document, and all supporting documents to: acsp@auduboninternational.org
- 8. Audubon International Dropbox: <u>www.dropbox.com</u>



Login Email: <u>files@auduboninternational.org</u> Login Password: audubon123 Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)

Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox 9. Submit via USB Drive to:

120 Defreest Dr, Troy, NY 12180

Certification Request Form Water Quality Management



Golf Course Name	 	
Address		
Contact Person		
Telephone/E-mail		

1. Statement of Affirmation

After reviewing the Water Quality Management portion of your Environmental Plan, please check each of the following and sign below to verify that you have met these goals by implementing all environmental management practices as outlined in your plan.

"I affirm that we have achieved the following goals and have completed all projects outlined in our environmental plan."

Overall Purpose:

□ We ensure clean water supplies and protect the health and integrity of water bodies, such as oceans, rivers, streams, wetlands, lakes, ponds and aquifers.

Goals:

- I. General Knowledge- We have improved our general knowledge regarding water quality protection and pollution prevention as it relates to golf course management, chemical storage and use, and equipment maintenance. We have identified the local watershed and water sources of the golf course. (Environmental Plan: Water Quality Management Section: Items 1-3, page 24)
- 2. Best Management Practices- We employ best management practices or structural controls near all water bodies to eliminate the potential for chemical runoff, nutrient loading, erosion, and drift. (Environmental Plan: Water Quality Management Section: Items 4-17, pages 24-25)
- 3. Monitoring- We visually and objectively monitor the health of water features to detect impaired water quality, identify causes, and correct problems as needed. (Environmental Plan: Water Quality Management Section: Items 18-21, Water Quality Management section, Environmental Plan, page 25)

Signed:	 		
-			
Date:			

Bes	t Manag	ement Practices		
1.	 Have you increased the amount of native emergent vegetation in your ponds? 		□ YES	□ NO
			Before	After
2.	2. Do you have a contained equipment wash off area?		□ NO	□ NO
			YES	YES
3.	Please	check the statement that best describes your equipment wash		
	area:			
		Wash water is recycled in a closed-loop system.		
		Wash water drains to city sewer.		
		Other, wash water drains to:		

Monitoring	Before	After
4. How often is water quality monitoring conducted?	 Never monthly 1x/year 2x/year 3x /year other: 	 Never monthly 1x/year 2x/year 3x /year other:
5. How many bodies of water are you conducting chemical analysis on?		
How many testing locations are you conducting chemical analysis on?		
6. Do you conduct macroinvertebrate testing in streams?	Before □ NO □ YES	After □ NO □ YES

3. Water Management Reference Charts

Please fill out the charts on pages 57-58 regarding how you manage water features. Make as many additional blank copies of the chart as you need before filling them out.

- 1. <u>Water Quality Management Information</u>- Please complete the chart regarding how you manage water features, such as ponds/lakes/streams/wetlands, to maintain water quality. Be sure to describe shorelines inside and outside of the water feature.
- 2. <u>Aquatic Weed/Pest Management</u>- Complete the reference chart regarding chemical controls used to manage water bodies. If no chemicals are used, please write "NO CHEMICALS USED" in the chart.

4. Back-up Documentation

Photographs

Please submit images of the following (we accept photographs, slides, and high quality digital images):

- Chemical Storage Area, *including* outside and inside
- Chemical Mix And Load Area
- Equipment Wash Area, *including* where water drains
- Fuel Island
- Representative water features, including examples of both in-play and out-of-play shorelines if both types are present on the golf course.

Golf Course Map

Label a map of the golf course with the following features:

- Locations of water test sites
- No-spray zones

Results of Water Testing
 Please submit water test results for one testing period. See page 25 for testing parameters.

4. Results and Successes

Please describe the results and successes of your efforts and how you plan to continue your Water Quality Management activities in the future. Have you also identified areas of concern related to water quality that you plan to or would like to address in the future?

Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials electronically:

- 10. E-mail scan or fillable PDF of this document, and all supporting documents to: <u>acsp@auduboninternational.org</u>
- 11. Audubon International Dropbox: <u>www.dropbox.com</u>



Login Email: <u>files@auduboninternational.org</u> Login Password: audubon123

Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)

Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox 12. Submit via USB Drive to:

120 Defreest Dr, Troy, NY 12180

Water Quality Management Water Feature Management Information

Water	Total	% f In Play	Description of Shoreline	Management Approach Along
Feature	Acres	Shoreline	(Vegetation and no-spray zones)	Shorelines
Example:			70% 3" turf	 Raised mowing height to 3" Heightened tolerance for weeds/diseases
			25% tall grass	 Designated no-spray zone
			E% will day and	Remove invasive plant species
	1/4		5% Wildflowers	Installed aerator/diffuser
Pond #1		80%	20% cattails (in pond)	Manually remove aquatic weeds
	acre			Visually monitor water quality
				Conduct tests for water quality
			no-spray zone width: ~25	No protective measures in place
			feet wide	
				Raised mowing height to 3"
				Heightened tolerance for weeds/diseases
				Designated no-spray zone
				Remove invasive plant species
				Installed aerator/diffuser
				Manually remove aquatic weeds
			no-spray zone width:	Visually monitor water quality
				Conduct tests for water quality
				No protective measures in place
				\square Raised mowing height to 3"
				Heightened tolerance for weeds/diseases
				Designated no-spray zone
				Remove invasive plant species
				Manually remove aquatic woods
				Manually remove aqualic weeks Visually monitor water quality
			no-spray zone width:	Conduct tests for water quality
				\square No protective measures in place
				Raised mowing height to 3"
				Heightened tolerance for weeds/diseases
				Designated no-spray zone
				Remove invasive plant species
				Installed aerator/diffuser
				Manually remove aquatic weeds
				Visually monitor water quality
			no-spray zone width:	Conduct tests for water quality
				No protective measures in place
				Raised mowing height to 3"
				Heightened tolerance for weeds/diseases
				Designated no-spray zone
				Remove invasive plant species
				Installed aerator/diffuser
				Manually remove aquatic weeds
			no-spray zone width:	visually monitor water quality Conduct tests for water quality
			, ,	Conduct tests for water quality No protective measures in place
				Raised mowing beight to 3"
				Heightened tolerance for weeds/diseases
				Designated no-spray zone
				Remove invasive plant species
				Installed aerator/diffuser
				Manually remove aguatic weeds
				Visually monitor water quality
			no-spray zone width:	Conduct tests for water quality
				No protective measures in place

Aquatic Weed/Pest Control Reference Table

Pest Problem	Water Feature	Active Ingredient(s) <u>and</u> Trade Name of Pesticide	Toxicity Class *	Average qty/year **	Application Schedule
Example: <i>Algae</i>	Lake #2 Pond #6 Pond #11	Cutrine Plus Copper sulfate	Danger (or Category I)	50 lbs ***	 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
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					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program
					 Curative program only Preventative when conditions favor outbreak Scheduled preventative program

* Toxicity classes are either listed as Danger, Warning, Caution or I, II, III, or IV - they are designated by the EPA or other regulatory body for your country, and can be found on the pesticide label or the MSDS sheet.

** This can be listed in lbs., gal or other depending on the label's measurement on the product you are working with.

*** If appropriate, indicate whether you are recording total pounds or only active ingredient

Certification Request Form Outreach & Education



Golf Course Name		
Address		
Contact Person		
Telephone/E-mail	 	

1. Statement of Affirmation

After reviewing the Outreach and Education portion of your Environmental Plan, please check each of the following and sign below to verify that you have met these goals by implementing all environmental management practices as outlined in your plan.

"I affirm that we have achieved the following goals and have completed all projects outlined in our environmental plan."

Overall Purpose:

We have implemented management practices that ensure ongoing support for stewardship initiatives, strengthen local community connections, and extend participation in environmental conservation activities.

Goals:

- I. General Knowledge- We have improved our ability to communicate our commitment to environmental stewardship and implement conservation projects. (Environmental Plan: Outreach and Education Section: Items 1-4, page 27)
- 2. Outreach and Involvement- We provide opportunities for patrons, staff, decision makers, and community members to contribute to environmental projects on the golf course. (Environmental Plan: Outreach and Education Section: Items 5-6, Outreach and Education section, Environmental Plan, page 27)
- 3. Education- We educate patrons, staff, decision makers, and community members about programs and projects on the golf course which improve environmental quality. (Environmental Plan: Outreach and Education Section: Items 7-9, page 28)

Signed:

Date:

		Before	After	Who/what group was involved (such as employees, patrons, or community groups)?
1. 2.	How many community organizations/experts/partners are involved in your environmental or outreach activities? Which of the following education projects have been implemented to raise awareness of your stewardship activities?			
	 Display of ACSP or environmental activities 	□ YES	□ NO	
	 Butterfly/hummingbird display garden 	□ YES	□ NO	
	 Nature trail 	S YES		
	 Educational signs 	VES		
	 Brochure 	VES	NO	
	 Newsletter articles 	S YES	NO	
	 Locally or regionally published articles 	S YES	NO	
	 Other (please list) 	VES		
3.	Which of the following outreach activities have you implemented to encourage employee/patron/community participation?	Before	After	wno/wnat group was involved (such as employees, patrons, or community groups)?
	 Gardening project 	S YES	NO	
	 Ecological restoration project 	U YES	NO	
	 Mount nest boxes 	U YES	NO	
	 Monitor nest boxes 	S YES	NO	
	 Inventory wildlife species 	U YES	NO	
	 Maintain or use a nature trail 	U YES	NO	
	 Provide a guide to environmental stewardship on the course 	U YES	NO	
	 Host a wildlife walk on or around the course 	U YES	NO	
	 Host tours of the course to showcase stewardship projects 	U YES	NO	
	 Host tournaments to support environmental projects 	U YES	D NO	
	 Host workshops on environmental projects or issues 	U YES	NO	
	 Sponsor a local school in the ACSP for Schools 	U YES	NO	
	 Other (please list) 	U YES	D NO	

3. Resource Advisory Group

Please list members of your Resource Advisory Group who help to plan and implement environmental projects and educational efforts at your course. What is their relationship to the course and their area of interest or expertise? At least one Resource Advisory Group member must not be employed by or a member of the course. <u>Please provide full</u> <u>contact information for each member so that we may contact them if necessary</u>. Make as many additional copies of this page as you need before filling out the chart.

Name	Title or Relationship to Course	Area of Expertise	Address or e-mail

- 1. How are Resource People involved? (*Check all that apply*)
 - □ Help conduct initial site assessment
 - and develop project plans
 - Help with filling out certification
 - forms
 - □ Review certification forms
 - □ Involved with environmental projects
- □ Involved with monitoring or
- evaluation
- □ Involved in member/community
- outreach
- □ Other:
- 2. How often do you meet with members of your Resource Advisory Group? (*Check all that apply*)
 - □ Meet frequently 1x/month or more
 - □ Meet regularly 1x/3 to 6 months
 - Meet rarely- 1x/year
 - Other:

- Contact individuals when their areas
- of expertise are needed
- Meet for initial planning or yearly review

4. Back-up Documentation

Photographs

Please submit images of the following (we accept photographs, slides, and high quality digital images):

- Environmental/Audubon Cooperative Sanctuary Display
- Environmental/Audubon Cooperative Sanctuary Signs
- Display Gardens (if applicable)
- Nature Trail (if applicable)
- People involved in stewardship projects

Educational Materials- Sample

Please include a sample of written educational materials used to educate patrons about your involvement in the ACSP or stewardship projects taking place on the course. This may include: newsletter or newspaper articles, brochure, guide, posters, *etc*.

Outreach and Involvement Materials- Sample

Please include samples of educational program flyers, thank you letters, or other proof of outreach and involvement activities.

D Proof of RAG involvement

Please include documentation of RAG involvement, including RAG meeting agendas, email correspondence, meeting dates, or other notes.

5. Results & Successes

What has been the overall result of your Outreach & Education projects? How will Outreach & Education be an ongoing part of your cooperative sanctuary efforts?

Keep digital copies of all your materials. Send one copy to the individual who signed the Statement of Support and Choose one of the following ways to submit your materials electronically:

- 13. E-mail scan or fillable PDF of this document, and all supporting documents to: acsp@auduboninternational.org
- 14. Audubon International Dropbox: <u>www.dropbox.com</u>



Login Email: <u>files@auduboninternational.org</u> Login Password: audubon123

Name the folder with your state abbreviation and property name. (Example: NY Burden Lake Country Club)

Email us at <u>acsp@auduboninternational.org</u> to alert us that you added files to the dropbox 15. Submit via USB Drive to:

120 Defreest Dr, Troy, NY 12180

Step 4: Certification Site Visit

CERTIFICATION VISIT INSTRUCTIONS

AudubonCooperativeSanctuaryProgramforGolfCourses

FORTHESUPERINTENDENTORPROPERTYREPRESENTATIVE

The purpose of the Certification Site Visit is to help Audubon International verify some of the more visible aspects of your environmental management activities and provide an opportunity for you to demonstrate some of the voluntary actions you have taken to protect and sustain the land, water, wildlife, and natural resources at your site.

Who leads the Certification Visit?

The Audubon Cooperative Sanctuary Program contact will conduct the site certification site visit with an Audubon International staff member. A site visit fee of \$400 for a half day visit or \$800 for a full day visit plus travel expenses are the responsibility of the member.

When do we schedule the Certification Visit?

Audubon International will contact you to arrange for the Site Visit step of the certification process once we have received the completed Certification Request Forms. Most visits take about 2 - 4 hours to complete.

What is included in the Certification Visit?

The primary focus of the visit will be on the more visible, tangible aspects of your environmental management program, with an emphasis on the major components of the ACSP:

- Wildlife and Habitat Management
- Resource Conservation
- Waste Reduction
- Outreach and Education

The property representative is responsible for covering these areas and explaining environmental management practices during the visit.

How is the Certification Visit evaluated?

A Certification Visit Form is filled out by the reviewer. The reviewer is asked to record observations. Results of the certification visit will be reviewed, and the responsibility for awarding certification rests with Audubon International staff.

GUIDELINES AND INSTRUCTIONS

Setting up the visit

1. Audubon International will contact you to schedule a date to visit the property.

2. We encourage you to review the Environmental Management Practices of the ACSP for Golf Course prior to the visit. These are printed in your Certification Handbook or can be found in the Educational Resources section of the member-only website.

Conducting the visit

3. Review the Certification Visit Outline included in this packet. It recommends golf course areas to include in the visit and things to point out, as well as topics to discuss.

• Certification Visit Outline - p. 63

After the visit

4. Email, mail, or fax the brief Certification Visit Summary sheet to Audubon International WITHIN TWO DAYS OF THE VISIT.

• Certification Visit Summary - p. 64

CERTIFICATION VISIT OUTLINE

The following outline offers a suggested way to structure the certification visit. It is merely a suggestion. You are welcome to reorder the various elements in any way that works for you.

LOCATION	WHAT TO DO
Meet at the Club House or pro shop	 Offer an overview of the course, membership, and your involvement in the ACSP to provide context for the visit. Show your ACSP display or any environmental education information at the club house
Habitat Area 1 on the course (<i>e.g.,</i> woods, wetland, meadow, etc.)	 Describe how the area is managed or how habitat areas are conserved Show wildlife enhancements, such as nest boxes, feeders, wildlife corridors, or naturalized areas. Describe typical wildlife sightings in the area or explain specific measures to attract or sustain birds, amphibians, mammals, etc.
Water Body that has been enhanced for wildlife or water quality.	 Describe measures you have taken to ensure wildlife access to water or good aquatic habitat. Show and explain shoreline buffers, and aquatic or shoreline plants Point out connecting habitats, if present Show and explain measures to maintain good water quality: "no spray or limited spray" zones aerators or fountains grass carp water quality testing
Habitat Area or Naturalized Area 2	 Describe conservation measures you have taken to maintain the area. This may include: removing invasive plants maintaining diverse layers or vegetation connecting habitat areas with corridors mounting signs As before, point out wildlife species or plant communities that you are working to attract and sustain
Green, Tee, or Fairway	 Explain a few of the regular turf management practices employed to keep the turf healthy, while minimizing chemical and water use. Use a scouting form to demonstrate IPM decision making. Describe or show IPM measures, such as scouting and monitoring, changes in mowing height, and reducing compaction or turf stress. Describe or show water conservation practices you employ.
Choose another area of the course	Point out additional environmental management practices. Choose an area of most interest to you, such as a place where you've made a difference in reducing water use, conserving wildlife, or educating golfers.
Maintenance Facility	 Describe measures that you have taken to ensure safe storage and handling of chemicals. Show the following areas: equipment wash area mix/load area chemical storage structure
Conclude the recertification visit.	 Ask whether there are additional questions you can answer.

CERTIFICATION VISIT SUMMARY

ACSP FOR GOLF COURSES

To be completed by the golf course superintendent (or course representative present during visit). Email to acsp@auduboninternational.org within two days of visit.

Date of Certification Visit ACSP Golf Course Name		Start Time		_ End Time	
Address					
City		State/Province	Zip		Country
Telephone	E-Mail			Website	
Golf course personnel present at certification visit (name(s)/title):					
Name of Reviewer		Title		Affiliation	·

COMMENTS

Please tell us about the visit. What went well? Not well?

Is there additional information we can provide you to further your environmental efforts?

If you would like us to include a personal quote from you in the press release, please provide a brief statement here:

Thank you for your continued participation in the ACSP and leadership in environmental stewardship!

DURING THE VISIT – REVIEWER NOTES

Wildlife & Habitat Management

Look for:

- wildlife habitat projects such as wildlife gardens, nest boxes, wildlife corridors, and natural areas
- wildlife access to water and good aquatic habitat

P Listen for:

- how the area is managed or how habitat areas are conserved - may include: removing invasive plants, maintaining diverse layers or vegetation, connecting habitat areas with corridors, mounting signs
- typical wildlife sightings in the area or specific measures to attract or sustain birds, amphibians, mammals
- wildlife species or plant communities that the course is working to attract and sustain

? Optional Questions:

- "Tell me about wildlife species you are working to attract and sustain on your course."
- "What are some of the challenges you have encountered in balancing the needs of golfers and the needs of wildlife?"
- "What have you found to be the most satisfying part of your efforts?"

Water Conservation & Water Quality Management

Look for:

- weather station
- shoreline buffers, aquatic plants

aerators

- Solution Listen for:
- how irrigation decisions are made
- benefits of buffers
- "no-spray" or "limited spray" zones
- water quality testing protocol

Optional Questions:

- "How do you determine when and how much you should water?"
- "What are some ways you try to conserve irrigation water?"
- "Please show me some of the things you do to protect water quality."
- "How are you evaluating your water quality"

DURING THE VISIT – REVIEWER NOTES (cont.)

Chemical Use Reduction & Safety

Look for:

- scouting forms to help make turfgrass management decisions
- equipment wash area mechanical or vegetative filtering of wash water; wash water should not flow into any surface water body
- chemical mix/load area spill containment
- chemical storage structure separate, locked storage area

D Listen for:

- turf management practices employed to keep turfgrass healthy
- Integrated Pest Management practices such as scouting, changes in mowing heights, reducing compaction

? Optional Questions:

- "I would like to learn about ways that you keep turfgrass healthy and try to minimize overall chemical use."
- "I would like to see ways you ensure safe storage, application, and handling of chemicals."
- "Let's take a look at where you mix and load pesticides and wash equipment."

Outreach & Education

Look for:

- ACSP or environmental display
- written materials
- signs

Disten for:

- involvement in the ACSP
- commitment to environmental quality
- how golfers, staff, the community are involved in environmental projects

? Optional Questions:

- "I'd like to look at ways you inform golfers and guests about your environmental efforts."
- "Do you have display or written materials that explain your involvement in the ACSP or other environmental activities?"
- "What are other ways you have tried to involve or inform people of your efforts?"

CERTIFICATION VISIT FORM

ACSP FOR GOLF COURSES

To be completed by the reviewer.

GENERAL INFORMATION				
Date of Certification Visit	Weather			
Name of Reviewer				
Title				
Organization/Affiliation				
Address				
City/State/Zip				
Telephone				
E-mail				
ACSP Golf Course Name		City/State		
Golf Course Superintender	nt or other golf course personnel present at certification visit (name(s)/titl	e):		
—				

Wildlife & Habitat Management

WILDLIFE CONSERVATION ACTIVITIES

This section focuses on golf course natural areas and wildlife species. The ACSP recommends a variety of projects and management practices to help golf courses protect and improve native habitats and the wildlife that depend on them for survival. Please check projects or practices that you observed (④) or were discussed (③) during the recertification visit.

0 Д Not Present **Not Verified** Naturalized areas (e.g., turfgrass converted to natural habitat) Butterfly or hummingbird garden(s) Habitat enhancement for frogs/salamanders Nest boxes for songbirds (e.g., bluebirds, swallows, wrens, wood ducks) Brush pile(s) for mammals What interesting plant and animal species did you Other: see or were discussed? **GOLF COURSE NATURAL AREAS** 0 Д No Not Verified Maintenance in these areas is kept to a minimum (e.g., tree thinning only as needed, golf carts kept out, trash removed) Invasive exotic plants are removed Diverse layers of vegetation are maintained (e.g., trees, shrubs, low-growing herbaceous plants, ground cover) Corridors of natural vegetation connect habitat areas on and off the golf course Signs are used in sensitive habitat areas WATER FOR WILDLIFE Not Д 0 **Not Verified** Present ~ 50% of shorelines that are **not in play** provide habitat (e.g., Actual ~% (required field, please tall grass, woods) estimate) Aquatic plants are present Logs, rocks, or other types of wildlife shelter are present in or around the water body Water body is connected to other habitats with corridors

COMMENTS

Water Conservation & Water Quality Management

A variety of best management practices help to ensure quality golf playing conditions, while safeguarding the environment. Some of these can be viewed on the course, while others may be briefly explained by the course representative.

WATER CONSERVATION ACTIVITIES					COMMENTS	
۲	Ð	Not Present	Not Verified			
				Irrigation decisions are based at least partly on current and forecasted weather.	-	
				The irrigation system is regularly maintained and repaired		
				Irrigation water goes where it is supposed to, not on sidewalks, roads, ponds, etc.	-	
				Amount of irrigated acreage has been reduced	_	
				Hand watering is employed to better target irrigation, without running the entire system		
				Upgrades to the irrigation system have been made (<i>e.g.</i> , new valves, part-circle heads, weather station, computer-controlle system)	- e -	
				Other:		
WATER QUALITY PROTECTION						
۲	P	Not Present	Not Verified		_	
()	<u>></u>	Not Present	Not Verified	Erosion is controlled or minimized.	-	
	》 □	Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer).	- Actual ~ mowing heigh estimate)	t (required field, please
		Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer). Aquatic or shoreline plants are present	- Actual ~ mowing heigh estimate)	t (required field, please
		Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer). Aquatic or shoreline plants are present Aerator/fountain is used in the water to increase oxygen	- Actual ~ mowing heigh estimate) -	t (required field, please
		Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer). Aquatic or shoreline plants are present Aerator/fountain is used in the water to increase oxygen "No spray zone" or "limited spray zone" has been designated near water bodies	- Actual ~ mowing heigh estimate) - Actual ~ width estimate)	t (required field, please
		Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer). Aquatic or shoreline plants are present Aerator/fountain is used in the water to increase oxygen "No spray zone" or "limited spray zone" has been designated near water bodies Turfgrass weeds and diseases are hand pulled or spot- treated near water bodies	- Actual ~ mowing heigh estimate) - Actual ~ width estimate)	t (required field, please
		Not Present	Not Verified	Erosion is controlled or minimized. The mowing height is raised around water bodies (also called Vegetated Filter Strip, Turf Filter Strip, or Buffer). Aquatic or shoreline plants are present Aerator/fountain is used in the water to increase oxygen "No spray zone" or "limited spray zone" has been designated near water bodies Turfgrass weeds and diseases are hand pulled or spot- treated near water bodies Water quality testing	Actual ~ mowing heigh estimate) Actual ~ width estimate) How often?	t (required field, please (required field, please (required field, please ask)

Chemical Use Reduction & Safety

An important goal of the ACSP is that golf courses safely and responsibly store, handle, and apply chemicals. At the maintenance facility, you will look at a number of practices that golf courses employ to meet this goal.

MAINTENANCE FACILITY - CHEMICAL STORAGE STRUCTURE					
0	Ð	Not Present	Not Verified		
				Chemicals are stored in a designated chemical storage building or structure	
				The chemical storage structure is labeled and locked; personnel access is limited	
MAINTE	MAINTENANCE FACILITY - MIX/LOAD AREA				
٢	Ð	Not Present	Not Verified		
				Pesticides are mixed and loaded over an impermeable surface (<i>e.g.,</i> concrete, pavement)	
				A spill containment kit is readily available	
MAINTENANCE FACILITY - EQUIPMENT WASH AREA					
۲	Ð	Not Present	Not Verified		
				Equipment washing and chemical mixing /loading occur on <i>separate</i> pads / surfaces	

Where does the wash water flow? (check one)

- **Wash water is recycled in a closed-loop system**
- **D** Wash water drains to a city sewer
- □ Wash water drains to ____

TURF MANAGEMENT ACTIVITIES (please check all that apply and describe "Other")

P	Not Present	Not Verified		
			Proper cultural practices are employed, such as:	
			Improving soil structure and drainage	
			Reducing compaction and turf stress	
			Adjusting mowing heights as needed	
			Other:	
			Integrated pest management (IPM) techniques are employed, such as:	
			Scouting, monitoring, and mapping	
			Setting thresholds for turf diseases and pests	
			Other:	
			 When problems occur, the environmental impacts of various pest control measures are considered and the most appropriate one for the situation is chosen. This may include: Evaluating weather conditions and altering cultural practices Rotating pesticide products Choosing lesser toxicity products Other: 	

COMMENTS

Education & Outreach

Outreach and education efforts help to ensure ongoing support for golf course stewardship initiatives and extend participation in environmental conservation activities to employees, patrons, and community members. Please check educational activities you saw relative to golf course communication with golfers and guests about environmental efforts.

EDUCAT	rional a P	ACTIVITIES Not Procent	Not Verified		COMMENTS
				Educational Display about Program / Environment	Where is the display located?
				Written information available (please check all that apply) I newsletter article(s) I flyer I brochure Vardage book I educational garden I other:	
				Educational signs or posters	Where are the signs & posters located?
				Other:	
OUTRE/	ACH ACT	VITIES (please)	check all that apply	/ & describe "Other")	—
	P	Not Present	Not Verified	, , , , , , , , , , , , , , , ,	
				Club member involvement in projects, such as: nest box project wildlife inventory gardens wildlife walks Other: 	
				Community involvement in projects, such as: youth group tours nest box project wildlife inventory gardens wildlife walks Other: 	
				Employee involvement in projects, such as: nest box project wildlife inventory Other:	_

SUBJECTIVE COMMENTS AND IMPRESSIONS

Your impressions are important to us. Please take a moment to answer the following questions about your visit.

Did the property meet your expectations of what a Certified Audubon Cooperative Sanctuary would be? Please explain.

Please include additional comments about your overall impressions, including any concerns or exceptional areas or projects that you observed.

Based on your area of expertise, are there recommendations you would make that would further the course's environmental stewardship efforts?

Certified golf courses receive a press release to help them promote their environmental efforts and accomplishments. Please offer a quote for inclusion:

Affirmation

I affirm that I have conducted this certification visit to the best of my ability and that this report accurately reflects the observations and results of my visit. I understand that sole discretion and responsibility in awarding certification to the golf course rests with Audubon International.

Certification Reviewer's Signature

Date
Audubon Cooperative Sanctuary Program for Golf Courses

Staying Certified



Troy, NY 12180 (518) 767-9051

Step 4 : Staying Certified

Once a course achieves certification, it is expected to continue its environmental management practices. We recommend that courses review their environmental goals and management practices yearly and update them, as appropriate. Many courses find that there are specific areas in which they excel (*e.g.*, outreach, nest boxes, naturalization, water conservation) and they concentrate on these strengths. Others look for ways to expand day-to-day environmental practices that lead to continual improvement.

Maintaining Membership

Golf courses must remain a member in good standing to maintain certification. Membership renewal invoices are sent via email and postal mail prior to the membership expiration date.

Recertification

Every three years, Audubon International requires that certified courses demonstrate that they are continuing their environmental efforts. Golf courses complete a survey of current management practices via backup documentation or host a site visit to document that certification standards continue to be met. These two types of recertifications alternate every three years. This is especially important if there has been a change in the superintendent or course management.

Hosting a Site Visit

Golf courses seeking recertification are required to host a site visit within three years of initial certification. The purpose of the site visit is twofold:

1. To help Audubon International verify some of the more visible aspects of the course's environmental management activities; and

2. To provide an opportunity for golf course representatives to demonstrate some of the voluntary actions they have taken to protect and sustain the land, water, wildlife, and natural resources around them.

An independent third-party conducts the site visits at the golf course, using a site visit checklist provided by Audubon International. The independent third party may be:

- A Resource Advisory Group member that is not employed by or a member of the course
- A Cooperative Extension agent
- A representative of a local watershed organization
- A member of a non-profit environmental organization
- A local government official
- An Audubon Steward

The site visit *does not* include a review of all aspects of certification. Nor does it determine whether the course achieves recertification. The responsibility for awarding recertification to the golf course rests with Audubon International staff.

Upon a golf course's initial certification, Audubon International sends more specific guidelines and handbooks for recertification, whether it be hosting a site visit or providing backup documentation.

Thank you for your participation in the Audubon Cooperative Sanctuary Program and commitment to environmental stewardship.

The ACSP Certification Handbook was developed in part with funding from the United States Golf Association



Notes