



Eifel Mountain Golf Course
Environmental Baseline Assessment
Spangdahlem AB, Germany Aug 05



Executive Summary

U. S. Air Force GEM Program

The U. S. Air Force Golf Course Environmental Management (GEM) program is a proactive Air Force Center for Environmental Excellence (AFCEE) initiative to foster a better understanding of the environmental challenges facing our golf courses worldwide. Armed with the support and approval of the Air Force Services Agency golf program, AFCEE's goal is to facilitate the creation of an environmentally friendly golf course facility while supporting the installation mission. AFI 32-7064 requires a GEM Plan as part of the Integrated Natural Resources Management Plan (INRMP).

The primary tenets of the GEM Program are to minimize or eliminate potential negative environmental impacts, attain and maintain daily compliance with all appropriate regulations, and constantly examine all aspects of golf course management to achieve the highest standards of environmental excellence.

GEM Program process

There are five steps in the GEM program process.

- Analysis
- Documentation
- Implementation
- Evaluation
- Revision



Environmental Compatibility Quotient

Actual ECQ	59
Potential ECQ	70

Potential environmental challenges

The following environmental challenges were identified during the GCEBA process:

- Airfield criteria violations
- Wetlands management
- Bird/Wildlife Aircraft Strike Hazard (BASH)
- Threatened or endangered species

Where do we go from here?

After confirming the environmental challenges (EC), the golf course staff should compile their preferred management approach to each in the context of their long-term goal of providing the best golfing experience for their customers. These management approaches must then be coordinated with installation environmental managers. Finally, the combined environmental and golf staff team should proceed toward finalizing the GEM Plan. The entire process is summarized on the AFCEE GEM program website (<http://www.afcee.brooks.af.mil/ec/golf/>).

Analysis

Course details

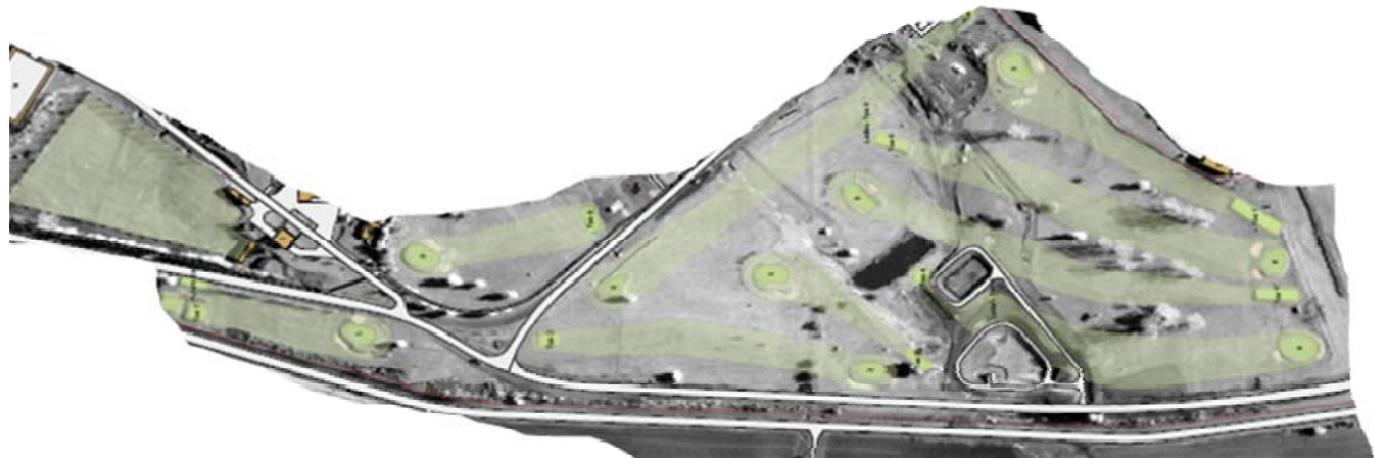
Architect	Civil engineering
Year constructed	Unknown
Climate	Temperate
Average annual rainfall	Approx. 30 inches
Average growing season	Approx. 200 days
Elevation	Approx. 330 meters ASL
Winds/Prevailing Direction	West/southwest
Total Facility Acreage	Approx. 60 acres
Par	9 Holes- 33-33-66
Yardage/Rating/Slope	Blue- 4856/?/? White- 4656/?/? Red- 4142/?/?
Turfgrass	Mixed rye/fescue
Tees-	Mixed rye/fescue
Fairways-	Bentgrass/mix
Greens	Mixed rye/fescue
Roughs-	



Eifel Mountain GC is situated just outside of the installation airfield.

Course description

The nine-hole Eifel Mountain Golf Course is located on the southwestern edge of Spangdahlem AB nestled in the resplendent west central area of Germany. The course is relatively short as it has been shoe-horned into a small area of land between the end of the runway and the installation boundary fence. Many of the trees on the course have been removed or have been severely pruned or topped to satisfy airfield operational concerns. There is one water feature on the course that unfortunately attracts water fowl as well as surlyn and balata. The course conditioning is worthy of more play than it receives as the local weather patterns tend to be unpredictable and somewhat unpleasant for golf at certain times of the year.



Eifel Mountain Golf Course Aerial Photo

Determining the Baseline (ECQ)

The following is a brief compilation of some of the responses in each of the ten Environmental Compatibility Quotient (ECQ) categories obtained in an interview with the superintendent and the manager conducted during the site visit.

ECQ Categories

- Overall Management Philosophy & Documentation
- Safety, Training, And Awareness
- Compliance
- Pesticide Use, Storage, & Handling
- Pollution Prevention
- Conservation Practices
- Water Resources
- Maintenance Practices
- Customer Relations & Education
- Miscellaneous Special Projects & Activities

Key to checklist responses

- **Yes** = Practice is complete or ongoing and can be verified.
- **Partial** = Practice has been initiated but needs further attention and improvement.
- **No** = Practice is not in place.

ECQ Checklists

The Environmental Compatibility Quotient (ECQ) checklists are a convenient method of assessing the overall performance, implementation, and completeness of an installation's Golf Course Environmental Management Plan. The checklists can be used in many ways including:

- As an analytical tool while compiling a Golf Course Environmental Baseline Assessment like this one.
- As a self-assessment tool for the golf course manager or superintendent.
- As an award nomination evaluation by a Golf Course Assessment Team (GCAT).



Eifel Mountain GC is relatively open with few trees and sand bunkers.

Interpreting the ECQ

The ECQ compiled for an installation's course is a snapshot of the overall performance and compliance with the GEM Plan. There are two measures obtained as a result of using the ECQ checklists to determine the status or quality of the environmental management program: 1) determining the actual and; 2) potential environmental compatibility quotients.

- **Actual ECQ-** the total percentage of "Yes" responses for all ten checklists. This number represents the current level of the golf course management practice compatibility with the environment
- **Potential ECQ-** the total percentage of "Yes" responses plus the total percentage of "Partial" responses for all ten checklists. Maybe the most significant measure; the potential ECQ represents a level of compatibility that could be reached by finalizing or fully implementing a particular practice or procedure.

ECQ Scoring Scale

Percent Responses Yes or Partial per Category	Level
93-100%	Advanced
83-92%	Getting there
73-82%	Showing progress
63-72%	Early stages
Less than 62%	Just started



The clubhouse is a work in progress.



There is no cart storage facility at Spangdahlem.

Overall Management Philosophy & Documentation				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Has management demonstrated that the environment is an important part of their responsibilities by initiating the GEM Planning process?	✓		
2	Has the golf course adopted and posted an Environmental Policy?			✓
3	Is the GEM Plan underway or completed, available, and updated regularly?		✓	
4	Is a map of the property highlighting identified environmental challenges such as landfills, threatened or endangered species habitat, restoration sites, floodplains, etc. used in the environmental management decision-making process and is it posted for customers?			✓
5	Is progress on environmental goals and objectives evaluated at least annually and regularly communicated to employees, customers, management, and the local community?		✓	
6	Are written records of water quality monitoring activities, results, and control measures readily available?			✓
7	Is an inventory of bird and mammal species maintained and readily available?	✓		
8	Is there a general understanding of how course management practices may positively enhance or adversely impact the environment?	✓		
9	Are the environmental impacts of pest control measures such as leaching and runoff potential, toxicity to non-target organisms, soil absorption capacity, pesticide persistence, water solubility, and effects on soil microorganisms and non-target species considered as part of the course management planning process?	✓		
10	Are records of pest treatments employed and their effectiveness maintained and used to guide future pest control decisions?	✓		
	Point totals for each column	5	2	3

Safety, Training, & Awareness				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	All employees are familiar with the GEM program and are trained on the importance of environmental compliance with the goals and objectives of the program as it applies to their duties?		✓	
2	All appropriate employees are trained to be familiar with U. S. Air Force, federal, state, and OSHA regulations that apply to storage, handling, and disposal of chemicals used on the property?	✓		
3	All employees are aware that chemical use, storage, and disposal and their potential risks to human health and the environment?	✓		
4	All employees are trained 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?	✓		
5	A current copy of all Material Safety Data Sheets (MSDS) for all chemicals used anywhere on the golf course property is maintained and readily available for use by employees?	✓		
6	All employees receive documented & regular training on all potential OSHA issues associated with their duties?	✓		
7	Are all golf course pesticide applicators active participants in a local respiratory and pulmonary testing program?	✓		
8	Are pesticides, fertilizers, and other chemicals stored on appropriate shelving in an approved storage facility?			✓
9	Are golfers notified in the pro shop and on the first tee about the day's planned or recently completed spraying of any chemical or fertilizer that may be hazardous to human health or public safety?		✓	
10	Are key staff members trained regarding water quality and conservation issues pertinent to the course and their particular duties?			✓
	Point totals for each column	6	2	2

Compliance				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are fuel storage/delivery area and equipment managed in accordance with federal, state, and local regulations?	✓		
2	Are installation environmental staff members included in pertinent, on-going course management discussions and plans at scheduled meetings?			✓
3	Are there golf course staff meetings where environmental management issues are regularly discussed?		✓	
4	Does the director of golf and the superintendent attend ESOHCAMP in-briefings and out-briefings?			✓
5	Does the director of golf and/or the superintendent coordinate with installation environmental staff on the various management plans that affect or include the golf course?			✓
6	Have all necessary permits been secured and/or updated and their requirements satisfied in a timely manner?	✓		
7	Has appropriate impact analysis (NEPA) been performed on all proposed actions on or affecting the golf course property?	✓		
8	Are containers used to store used oil in good condition, not leaking, and clearly labeled?	✓		
9	Has the golf course staff submitted their proposed management approach to the identified environmental challenges to the installation environmental staff for coordination and review?			✓
10	Were there less than two major golf course facility-related findings during the last official ESOHCAMP visit?	✓		
	Point totals for each column	5	1	4

Pesticide Use, Storage, & Handling				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are there trained scouts on staff other than the superintendent to monitor turf and plant health and pest populations regularly using a process to notify management of pest problems and organized into a report or guide so that they can be used for future pest control solutions?		✓	
2	Are there written pest profiles of common pest species with a variety of potential control measures pre-evaluated including alterations in cultural management, biological, physical, and mechanical controls prior to treating the problem on the course?			✓
3	Are there established and documented aesthetic and functional thresholds for all managed areas to effectively manage pest populations and reduce chemical use?		✓	
4	Is there a specially designed pesticide mixing area where all mixing is performed by appropriately trained personnel?	✓		
5	Has a current list of pesticides and other chemicals stored or used at the golf facility been provided to the appropriate Fire Department(s)?	✓		
6	Is there a written Integrated Pest Management Plan readily available and updated in use at the facility?			✓
7	If personal protective equipment is required for pesticide use, storage, or handling, is it available for use by trained individuals?	✓		
8	Are written and readily available records maintained of all applications of pesticides made by certified applicators, including the following? <ul style="list-style-type: none"> - the quantity of each pesticide used - the chemical or common name of the active pesticide ingredient(s) - the pest or purpose for which the pesticide was applied --the date and place of application. 	✓		
9	Is the chemical storage structure/area locked, well ventilated, fire resistant, and is access limited to select personnel?		✓	
10	Are there designated and documented "no spray" areas around pond, river, stream, or lake edges and have they been communicated to pesticide applicators?			✓
Point totals for each column		4	3	3

Pollution Prevention				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are there designated and documented "minimally-maintained" or natural vegetative buffer areas around pond, river, stream, or lake edges and have they been communicated to mower operators and pesticide applicators?	✓		
2	Has the Installation Spill Plan been amended to include the golf course facility and is there a spill containment kit at each required location and are there spill containment procedures in place?	✓		
3	Does the chemical storage area have a sealed metal or concrete floor and are all liquid pesticides handled over an impermeable surface?	✓		
4	Does the chemical storage area have a lip along the edges to contain spills?			✓
5	Are liquid products stored below dry products and are dry materials stored on pallets or shelves to keep them off the floor?	✓		
6	Have all the golf facility employees regularly received documented and approved HAZCOM and safety and health training?	✓		
7	Are grass clippings blown off equipment with compressed air instead of or prior to washing?	✓		
8	Are gasoline, motor oil, brake and transmission fluid, solvents, and other chemicals used to operate or maintain equipment and vehicles prevented from directly or indirectly entering water bodies?	✓		
9	Has the watershed in which the course resides and contributes runoff to been identified and mapped to aid the golf course staff in the management of their facility?	✓		
10	Are appropriate quantities of fertilizers applied during weather conducive to reducing the potential for leaching and runoff?	✓		
	Point totals for each column	9	0	1

Conservation Practices				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are recycling containers conveniently provided for customer and employee use throughout the golf course facility?			✓
2	Are there officially and appropriately designated minimally maintained areas on the golf course facility grounds?	✓		
3	Has the irrigation system or its components recently been upgraded to reduce inefficiency, malfunction, and overall water use?	✓		
4	Has all "non-target" irrigation (ponds, natural, or out of play areas, etc.) been eliminated or minimized?	✓		
5	Have flow meters been installed to monitor water use and detect potential waste?	✓		
6	Has the entire golf course facility property been examined for critical habitats, threatened or endangered species, wetlands, floodplains, and historical/cultural resources?	✓		
7	Are employees encouraged to minimize their trips around the course to conserve on the use of fossil fuels?	✓		
8	Does the snack bar utilize reusable plates and silverware for use by customers throughout the facility's operating hours?			✓
9	Have all potential maintenance practices for designated "minimally-maintained" or natural areas been coordinated with the installation Bird/Wildlife Aircraft Strike Hazard (BASH) officer and environmental management personnel?	✓		
10	Are all motorized golf course equipment checked regularly for excessive air polluting emissions?	✓		
Point totals for each column		8	0	2

Water Resources				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are water features regularly monitored for algae, erosion, excessive aquatic plant growth, fish kills, and sedimentation?	✓		
2	Are wash and wastewater kept from making direct contact with surface water and are they recycled or allowed to filter through a vegetative area when cleaning and maintaining equipment?	✓		
3	Outdoor irrigation of non-golf course landscape areas are regularly monitored and maintained for leaks and efficient performance?	✓		
4	Has the golf course staff coordinated with stormwater management planning requirements from the installation's environmental staff?	✓		
5	Have part circle irrigation heads been installed where possible to preserve water resources and reduce maintenance while minimizing potential negative impacts to surrounding minimally maintained areas?	✓		
6	Are all water feature maintenance tasks coordinated with the installation natural resource manager and bird/wildlife aircraft strike hazard (BASH) officer?	✓		
7	Has the irrigation system been completely checked for proper water distribution in all irrigated areas and are water leaks fixed in a timely manner?	✓		
8	Are moving water bodies such as streams or creeks that pass through the golf course regularly monitored for water quality both upstream and downstream of the course?	✓		
9	Does the facility have a Drought Management Plan written, ready, and available if, or when, irrigation restrictions may be instituted and required by the community or the installation?			✓
10	If necessary, are water quality problems immediately reported to supervisors and appropriate installation environmental staff members for instruction and direction?			✓
	Point totals for each column	8	0	2

Maintenance Practices				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Is there a written, regularly updated, and readily available Golf Course Maintenance Plan?	✓		
2	Does the Maintenance Plan include individual plans such as Integrated Pest Management, Tree Management, Hazard Communication, Drought Management, and Water Resources Management?		✓	
3	Are green, tee, and fairway mowing heights maintained at reasonable levels without continually stressing turf or maximizing chemical inputs?	✓		
4	Are there regular and documented procedures in place to continually improve soil health such as topdressing, organic amendments, aeration, and drainage?	✓		
5	Is there a regularly-updated and readily-available map of the course's "hot spots" requiring special care or regular attention?			✓
6	Is all maintenance equipment maintained and cleaned in a manner that eliminates the potential for spreading of pest or disease contamination?	✓		
7	Has there been a complete examination for potential negative environmental impacts of all aspects of the golf course facility operation including the snack bar and grill, clubhouse, pro shop, and maintenance complex?	✓		
8	Is contour mowing used to conserve fuel and increase playability and aesthetics?	✓		
9	Have all playing surfaces been inventoried and mapped for soil types including soil structure, nutrient levels, organic content, compaction, and water infiltration?			✓
10	Are soil tests and plant tissue analysis used to determine nutritional requirements?			✓
	Point totals for each column	6	1	3

Customer Relations & Education				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are the course manager and superintendent involved in a regularly updated, documented, and on-going customer educational program?		✓	
2	Is there a conveniently located and highly visible place at the course or clubhouse where golf course environmental management notices and informational messages are regularly posted for customers?			✓
3	Do the course manager and superintendent actively communicate with customers to determine and document their points of view?	✓		
4	Is there active and regular communication with the golf management staff, civil engineering, environmental management, the Services manager, and commanders by course management?	✓		
5	Does the golf staff regularly survey their customers on how they rate the various elements of the golf course facility?	✓		
6	Is there consistent and attractive signage around the course and grounds that would increase the awareness of the average golfer to the environmental management practices employed?			✓
7	Are there signs appropriately located to warn golfers of hazards around or near recycled or otherwise non-potable water?	✓		
8	If applicable, have areas of the course been designated "Environmentally Sensitive Zones" per USGA rules?			✓
9	Are course staff members trained regularly on how to improve their dealings with customers?	✓		
10	Are there clinics provided to teach beginning golfers the basics of the game and to teach all levels of golfers the rules of the game?	✓		
	Point totals for each column	6	1	3

Miscellaneous Special Projects & Activities				
#	Environmental Compatibility Indicator	Yes	Partial	No
1	Are there projects planned and funded for the near future that would demonstrate the compatibility of the course's management methods with protection of the environment?			✓
2	Are there projects planned and funded to reduce the course's potential negative environmental impacts?			✓
3	Are there tournaments or other events planned that may educate customers on the environmental challenges faced by the golf staff at this installation?			✓
4	Are there field trips for local students or other community groups hosted at the course?	✓		
5	Are there projects planned to eliminate or minimize a potential erosion problem?			✓
6	Does the course have a native tree installation program complete with planting plan and maintenance schedule?			✓
7	Are any of the local schools or universities involved in educational or research activities at your course?			✓
8	Are there special facility-wide recycling programs underway?		✓	
9	Is your course an active participant in the USAF Golf Environmental Management Program?	✓		
10	Has your facility been nominated by your MAJCOM for the golf course environmental management award in the last 3 years?			✓
	Point totals for each column	2	1	7

ECQ Summary

#	Environmental Compatibility Quotient Category	Yes	Partial	No
1	Overall Management Philosophy & Documentation	5	2	3
2	Safety, Training, & Awareness	6	2	2
3	Compliance	5	1	4
4	Pesticide Use, Storage, & Handling	4	3	3
5	Pollution Prevention	9	0	1
6	Conservation Practices	8	0	2
7	Water Resources	8	0	2
8	Maintenance Practices	6	1	3
9	Customer Relations & Education	6	1	3
10	Miscellaneous Special Projects & Activities	2	1	7
	Composite point total/response percentage	59	11	30

GCEBA Results

* Eifel Mountain Golf Course, Spangdahlem AB, Germany

- Actual ECQ (# of "Yes") = 59 "Just started"

- Potential ECQ (Actual ECQ plus "Partial") = 70 "Early stages"

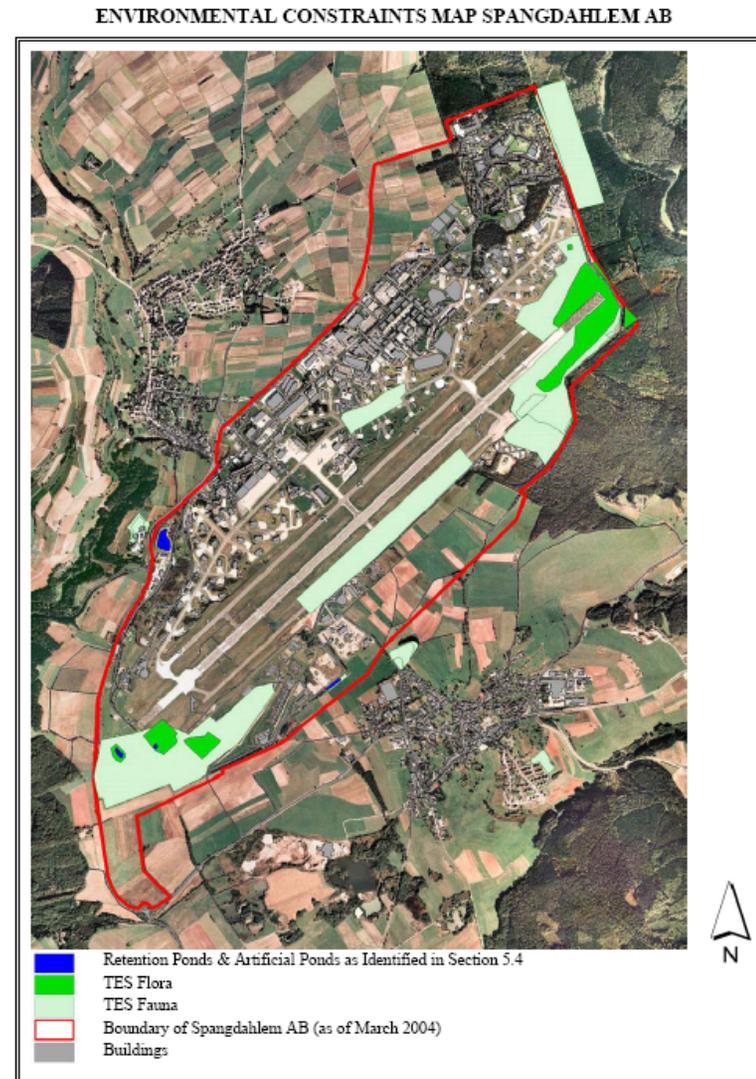
Potential environmental challenges

One of the important results of the GCEBA process is the identification of potential environmental challenges (ECs) to be addressed in the long-term GEM Planning process. After confirming each EC, the golf staff will determine the best management approach that will satisfy the goals of the golf facility from the course playability and customer satisfaction perspectives first. Then the golf staff's preferred management approach should be coordinated with the installation's environmental staff for refinement, coordination, and approval.

Ultimately, the combined environmental and golf staff team should proceed toward finalizing the GEM Plan. The entire process can be viewed at the AFCEE GEM website (<http://www.afcee.brooks.af.mil/ec/golf/>).

The following potential environmental challenges were identified during the GCEBA process:

- Airfield criteria violations
- Wetlands management
- Bird/Wildlife Aircraft Strike Hazard (BASH)
- Threatened or endangered species



Excerpt from INRMP illustrates the environmental constraints of the installation. The golf course is located at the end of the southwestern end of the runway.

AIRFIELD CRITERIA VIOLATIONS

No specific information was gathered during the site visit on airfield criteria violations at the Eifel Mountain Golf Course. The fact that the runway approach light stanchions walk right through the course indicates that at least portions and perhaps the entire course is probably in either the clear zone or accident potential zone 1 or 2. Operationally, this is the most significant environmental challenge for the golf staff.



Airfield lights seem like mechanical sentries as they “march through the golf course down the slope.



One of the golf course ponds supports many plants and animals.

WETLANDS MANAGEMENT

Although there are no officially-designated wetlands on Spangdahlem AB, the ponds at the Eifel Mountain Golf Course become the focus of several issues, most being other environmental challenges identified in this report. One specific issue is the potentially threatened or endangered species that may frequent or have “homesteaded” the ponds. Vegetative buffers along the banks of the ponds could increase the survivability of some of these protected species. In addition, according to the Oct 03, Threatened Species Survey, the elimination or more intense management of fish in these ponds would greatly enhance the ability of some species to successfully compete and thrive.



This excerpt of a recent aerial photo illustrates just how close the end of the airfield is to the golf course and one of its water features.

BIRD/AIRCRAFT STRIKE HAZARD (BASH)

According to the INRMP, “under the German Federal Nature Conservation Law (Bundesnaturschutzgesetz) (Article 20d) and the Federal Species Conservation Ordinance (Bundesartenschutzverordnung) it is prohibited to disturb wild animals (including birds) willfully, or to catch, injure or kill them without good cause. Therefore special permission for removal of nests/birds pest control measures must be obtained from the State of Rheinland-Pfalz (specifically Rheinland Struktur-und Genehmigungsdirektion Nord) when required.” Since the course is located in such close proximity to the airfield, the golf should work closely with the BASH officer to ensure that supporting the mission is intimately integrated into their management procedures.

THREATENED OR ENDANGERED SPECIES

According to the INRMP, “moles and rabbits are considered pests within the base and are controlled in accordance with German Law. Moles are controlled on the golf course and around the Headquarters facility only. Moles are a protected species under Host Nation and European laws, however a special permit, which is held at the Environmental Flight, has been issued to Spangdahlem AB, which authorizes the trapping of 6 moles a year. The CEOHE have also taken preventive measures, by installing high frequency solar powered devices, to discourage mole populations on base. Rabbit populations are controlled through the use of a repellent, which is deemed effective. As part of the BASH pest management initiative, Spangdahlem AB has submitted a request to the State for permission to catch and release small mammals.”

In the care of the installation’s water features, the TES 2004 survey recommended that “reducing the stock of ornamental fish in the two golf course ponds could significantly improve the habitat conditions for the natural aquatic fauna consisting of amphibians, dragonflies, and grasshoppers”.

Additionally, Spangdahlem AB as a habitat for TES species, is considered to be of regional importance. The most important species at Spangdahlem AB are the Meadow Pipit, Whinchat, and Lapwing. These species favor moist grasslands: these birds were generally observed in three areas, the grasslands and ponds around the Ammunition Depot and the golf course, the ruderal area, hedges and forest southeast

of the runway near the nature trail and the grassland and construction areas around the northeastern end of the runway.

6 butterfly species on the Red List for Rheinland-Pfalz were recorded, of which 2 are also on the Red List for Germany. 4 dragonfly species on the Red List for Rheinland-Pfalz were recorded, 2 of which are also on the Red List for Germany. There was a wide ecological range of recorded species. These species were observed in several different habitats, primarily consisting of grasslands, forested areas and in the vicinity of the ponds at the golf course.

Dragonflies

Within the base, species were only found at the pond at the golf course and the pond east of the golf course.

Grasshoppers

6 grasshoppers species on the Red List for Rheinland-Pfalz were recorded, 3 of which are also on the Red List for Germany. Typical habitats for grasshoppers are rare within the Air Base, due to the high intensity of mowing. The grasshoppers were recorded in the meadow areas in the northeastern end of the flight line (Calluna heath) and in the vicinity of the ponds at the golf course, where the vegetation is maintained at a lower intensity.

Under the German Federal Nature Conservation Law (Bundesnaturschutzgesetz) and the Federal Species Conservation Ordinance (Bundesartenschutzverordnung) most birds are protected. The

Environmental Flight requests special permits from the State of Rheinland-Pfalz (specifically Rheinland Struktur-und Genehmigungs-direktion Nord) for dispensation from certain requirements under the above legislation, when required. Requested permits include permits for bird control (pigeons), mole control (the trapping of 6 moles is permitted per year at the golf course) and bird's nest removal (House Martins and Swallow Nests).

Mole control is done on the golf course and around the Headquarters facility only in accordance with German law and with permission of the Higher Nature Conservation Authority for the State of Rhineland Palatinate (Struktur-und Genehmigungsdirektion Nord at Koblenz). Trapping is the only control used on Spangdahlem AB.



Mole damage on the course is a common sight.



Conclusion

The Eifel Mountain Golf Course at Spangdahlem is beset with some of the worst problems a U. S. Air Force golf facility could possibly have – airfield criteria violations, bird/wildlife aircraft strike hazards, and only 9-holes. Add to this the sketchy weather conditions for much too long each year and you get a situation that may be difficult to defend. U. S. Air Force golf courses are under increased pressure every year to become self sufficient or make a profit so that they can help support the rest of the morale, welfare, and recreation program. Eifel Mountain Golf Course's future is at best unsure. Maybe good people like the interim golf manager can make it work.

Areas needing improvement

The ECQ Summary on the previous page highlights the following areas for improvement:

- Overall Management Philosophy & Documentation
- Compliance
- Pesticide Use, Storage, & Handling
- Miscellaneous Special Projects & Activities

The gallery

This section of the report will be where some of the more revealing photographs (of the literally hundreds taken during the site visit) of pests, maintenance practices, and other areas where improvements may be made to create the best possible golf facility within the limited budget and support of the mission.



The lone water feature at Eifel Mountain could be its undoing.



The maintenance complex is relatively roomy and well-equipped.



The snack bar does a brisk business with breakfast leading the way.



Site amenities are provided at the teeing areas.



The golf course pond is almost directly in line with the runway.



All weather teeing areas at the range come in handy yearround.



Native plants are added above liner on new stormwater pond.



Maintenance complex protects equipment from harsh elements.



Greenside bunker adds to the challenge of the approach to the 5th.



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**Air Force Center for Environmental Excellence
Technical Directorate
Natural Infrastructure Division**

For additional assistance or more information, please contact:
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AFCEE/TDN, 3300 Sidney Brooks, San Antonio, TX 78235-5112

Please visit our Golf course Environmental Management (GEM) Program website:
<http://www.afcee.brooks.af.mil/ec/golf/>