

Irina Pavliuk

(Kiev, Ukraine)

Roman Rastvortsev

(Kiev, Ukraine)

ФІЗИЧНА КУЛЬТУРА ТА ПРОФЕСІЙНИЙ СПОРТ

(Фізична культура і спорт: проблеми дослідження, пропозиції)

ENVIRONMENT SAFETY AND PRESERVATION OF THE NATURAL ON THE ECOLOGICAL GOLF COURSE

Sports play an important role in our lives. From the early childhood years where we take sports very seriously to the later years in life where we consider it as a hobby, a fitness ritual, and sometimes even a profession. Today in every part of the world some sport is passionately followed. People take their sporting heroes as their role models and often have an emotional attachment with their favorite sports stars and sports teams [6]. Golf is at No 10 in Popularity in the World among other Sports. with more than 390 million fans in the US, Canada, and Europe. Golf is a precision club and ball sport in which competing players use many types of clubs to hit balls into a series of holes on a course using the fewest number of strokes. It is defined, in the rules of golf, as “playing a ball with a club from the teeing ground into the hole by a stroke or successive strokes in accordance with the Rules.”

The average age of a golf member is 45 years old. This is older than most sports. The accessibility of golf which is prone to fewer injuries than contact sports is partly the reason why this sport is so popular. Golf is played by young (8% of golfers are junior members) as well as old, it's not uncommon to see retired men and women still playing golf several times a week in their 60's and 70's [5,6].

Table 1**Most Popular Sports in The World**

#	Sport	EstimatedFans	RegionalPopularity
1.	Soccer / AssociationFootball	3.5 Billion	Europe, Africa, Asia, America
2.	Cricket	2.5 Billion	Asia, Australia, UK
3.	Basketball	2.2 Billion	US, Canada, China, and the Philippines
4.	FieldHockey	2 Billion	Europe, Africa, Asia, Australia
5.	Tennis	1 Billion	Europe, Americas, andAsia
6.	Volleyball	900 Million	Asia, Europe, Americas, and Australia
7.	TableTennis	850 Million	Asia, Europe, Africa and Americas
8.	Baseball	500 Million	US, Japan, Cuba, and the Dominican Republic
9	AmericalFootball Rugby	410 Million 410 Million	USA mainly France, England, New Zealand, South Africa
10	Golf	390 Million	Europe, Asia, America, Canada

Golf, unlike most ball games, cannot and does not utilize a standardized playing area, and coping with the varied terrains encountered on different courses is a key part of the game. The game at the usual level is played on a course with an arranged progression of 18 holes, though recreational courses can be smaller, often having nine holes. Each hole on the course must contain a teeing ground to start from, and a putting green containing the actual hole or cup 4 ¼ inches (11 cm) in diameter. There are other standard forms of terrain in between, such as the fairway, rough (long grass), bunkers (or "sand traps"), and various hazards (water, rocks) but each hole on a course is unique in its specific layout and arrangement [5].

Golf is played for the lowest number of strokes by an individual, known as stroke play, or the lowest score on the most individual holes in a complete round by an individual or team, known as match play. Stroke play is the most commonly seen format at all levels, but most especially at the elite level.

The development of golf is often very valuable because of its role in economic development - it acts as a core of tourist destinations in the regions, and as an important method of rural diversity. Golf courses can also be good places for public recreation and improve the quality of the local environment if they are reasonably planned and managed. [2,6].

Golf is a land-demanding sport. An 18-hole golf course occupies on average 65-70 ha, of which approximately 20 ha are intensively managed and used playing surfaces such as tees, fairways and greens. The remaining area, 40-70%, is extensively managed natural land.

The European Golf Association (EGA) has recently recognized that the quality of golf courses is fundamental to the satisfaction of golf, for players of all standards, and the success of amateur and professional golf tournaments, encourages the implementation of best practices for the development and management of golf courses. Also supports the efforts of organizations representing professional Greenkeeping and golf course architecture, especially the European Federation of Greenkeeping Golf Associations (FEGGA) and the European Institute for Golf Course Architecture (EIGCA). The maintenance and design of the fields also take into account their environmental impact [1,2].

In 2003 year FEGGA produced its Environmental Policy Document, endorsed by all Member Associations of FEGGA. It is also supported by The Committed to Green Foundation. The FEGGA Policy Document encourages ownboth the implementation of an Environmental Programme, along with clear guidelines in establishing the programme. FEGGA very much realises the importance of good environmental management within golf, both dealing with the issues and also promoting the positive work done within golf throughout Europe.

On a golf course there can be a mosaic of different environments and biotopes that create the conditions for rich plant and animal life and a varied recreation space. Forest and water environments are often interspersed among open environments of a meadow character, bare sand and sunny verges [3,4].

Ensure that golf courses are built, managed and used in such a way that they become a resource for conserving and developing a rich diversity of plant and animal life. In order to achieve this, there is a need for new knowledge, new advice and recommendations based on research and development within the following project areas. There is a need for more knowledge and documentation of verified experiences on how golf courses can be used and improved as a resource in the work on biological diversity. Advice and recommendations on construction, maintenance and use need to be developed for natural elements such as wetlands, ponds, meadows, forest edges and deciduous trees. In addition, methods are needed to monitor and evaluate biotope improvement measures on golf courses.

Multifunctional golf courses are currently an underutilised resource. If golf courses were to be used to supply a number of functions, this would provide a range of important services that are in demand by society. In addition to offering a high quality arena for golf, golf facilities could also contribute e.g. to improving biological diversity, conserving natural and cultural environments and providing recreation areas that are open to the public and to other outdoor activities.

The EAG is aware that environmental problems exist and will become increasingly relevant to the success and good running of the game. In this way, the European Association promotes that all its members, golf clubs and maintenance staff are aware of the local environment and cooperate with governments, groups and organizations that are concerned with the environment to ensure continuous improvement in their programs. [1,3].

In accordance with EU directives, as well as requirements, everything is strengthened in Europe, environmental protection issues are being developed to create national programs. Programs should provide for the appropriate qualifications of golf club personnel in the use of fertilizers and plant protection products, the use of certified products, the involvement of professional consultants, etc.

The creation of a unified European training system offered by FEGGA implies the development and certification of national programs based on common European standards, the introduction of a new classification of specialties, the introduction of a common European diploma.

FEGGA conducts a number of events as part of the program to support various educational initiatives, hears reports from participants in the program for the training of greenkeepers and designers.

Ecological Golf Course Management is the most comprehensive work ever done on ecological turf management. It's a must-have for any golf course superintendent, sports field manager, or turf professional interested in reducing or eliminating chemical pesticide use.

Ecological Golf Course Management focuses on managing the health and welfare of all soil organisms from a single-celled bacterium to fully developed turf plants and connects the reader to the important and relevant interactions between them. It points out ways to exploit natural plant defense systems that have been largely ignored and to engage many of the powerful allies that live above and below ground.

Ecological Golf Course Management explores in detail the many aspects of:

- Biological and botanical pest control;
- Plant stress management;
- Compost production and use;
- Natural disease suppressants;
- Biological fertility management;
- Soil, leaf tissue, and water analysis;
- The ecological impact of conventional pesticides and cultural practices.

The EGA Environmental Unit was founded in January 1994, co-launched by EGA, R&A and the PGA European Tour. This block has been developed by leading golf bodies in Europe to recognize the need for a coordinated approach to environmental issues in golf.

Compliance with the requirements for a professional golf course did not affect the overall eco-structure of the area. On the contrary, it was thanks to the strict imitation of environmental standards that an unusual atmosphere was created: in the morning on the golf courses you can meet hares, deer and porcupines, see pheasants and a large number of other birds that live in the wild nature of the area. Green fields, wheat and sunflower fields, olive groves, hills and mountains, seascapes - all of the above serves as a luxurious backdrop for an unforgettable sports holiday on the golf courses.

Today there are several programs to preserve the environment:

- the program "Striving for Green" - 1999-2003;
- - organization of the Golf environment (2005 and present).
- - EGA Golf Course Committee
- - R&A Golf Course Committee, (2002 and present) [1].

When designing and performing any construction work, the preservation and rational use of irreplaceable energy sources, the preservation of water resources should be maximized; cleaning and minimizing waste (garbage), protecting human health in accordance with air, water and earth standards.

In any type of construction and planning of operation, it is necessary to strive to reduce water consumption. Modern drainage systems make it possible to use waste and household water for agricultural needs. It is necessary to use new technologies and developments.

IGF, FEGGA and its affiliates are working to ensure that future generations will enjoy golf and the facilities they play on.

Conclusions. Today golf is one of the 10 most popular sports in the world, and ecology has a constant impact on the human body, therefore, it is necessary to establish an international ecological order on golf courses, which would provide for:

- the introduction of mandatory for all countries average boundaries of the maximum concepts of fertilizer use and international control over their observance;

- international environmental expertise of all new large projects of golf courses;
- forms of responsibility for the leaders of golf organizations for the destruction of ecosystems;
- providing an adequate concept for exploiting their non-renewable natural resources in the interests of the world market;
- creation of an incentive mechanism, dissemination and implementation of clean technologies.

References

1. 75th Anniversary. EuropeanGolfAssociation / ChristophMeister. – Switzerland. – 2012. – P. 101.
2. Павлюк, І. С. Екологічні програми міжнародних організацій та клубів з гольфу / І. С. Павлюк // Спортивний вісник Придніпров'я. - 2015. - № 3. - С. 112-115.
3. Colding, J. & Folke, C. 2009a. The Role of Golf Courses in Biodiversity Conservation and Ecosystem Management. Ecosystems 12: 191-206
4. Wernersson, L. 2009. Kulturhistorisk analys av Kristianstads Golfklubbsgolfbanori Åhus. Biosfärkontoret Kristianstads Vattenrike. Vattenriket i focus 2009:04
5. [Електронний ресурс] // Режим доступу: <http://www.abbasecology.co.uk>
6. [Електронний ресурс] // Режим доступу: <https://sportsshow.net/top-10-most-popular-sports-in-the-world/>

Павлюк Ірина Сергіївна

+38067 442 44 06

4424406@gmail.com

Національний університет харчових технологій

Завідувач кафедри фізичного виховання, доцент, кандидат наук з фізичного
виховання і спорту

Растворцев Роман Анатолійович

roman.sltm@gmail.com

Національний університет фізичного виховання і спорту України

НЕОБХІДНІ СЕРТИФІКАТИ