

YDF Manual for Environmental Awareness

Guidelines for teaching Football and Life Skills

Youth Development through Football



Under the patronage of
UNESCO

United Nations
Educational, Scientific and
Cultural Organization

youth
development
football



giz

Implemented
by GIZ



On behalf of the
German Government



Co-funded by the
European Union



In partnership
with SRSA



Youth Development through Football (YDF) is a project dedicated to educate disadvantaged youths in ten African countries.

It is implemented by the 'Deutsche Gesellschaft für Internationale Zusammenarbeit' (GIZ) in partnership with the Department of Sport and Recreation South Africa (SRSA).

The project is part of the South African - German development cooperation. It is funded by the German Government and co-funded by the European Union.



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The 'Youth Development through Football' (YDF) project has its roots in the 2006 FIFA World Cup™. It was launched in 2007 and will run until 2012. The project is part of the 'South African - German Development Co-operation'. It is funded by the 'German Federal Ministry for Economic Co-operation and Development' (BMZ), co-funded by the 'European Union' (EU) and implemented by the 'Deutsche Gesellschaft für Internationale Zusammenarbeit' (GIZ). The project partner is 'Sport and Recreation South Africa' (SRSA).

YDF is a football project aimed at the youth. At the same time, it far surpasses that description. The aim of the project is to support socially disadvantaged boys and girls in such a way that they are able to take their own lives 'in hand' and shape them positively. Their passion for football facilitates access to these youths. The YDF project will be established in all South African provinces and in nine other African countries.

YDF Manual for Environmental Awareness

Guidelines for teaching Football and Life Skills

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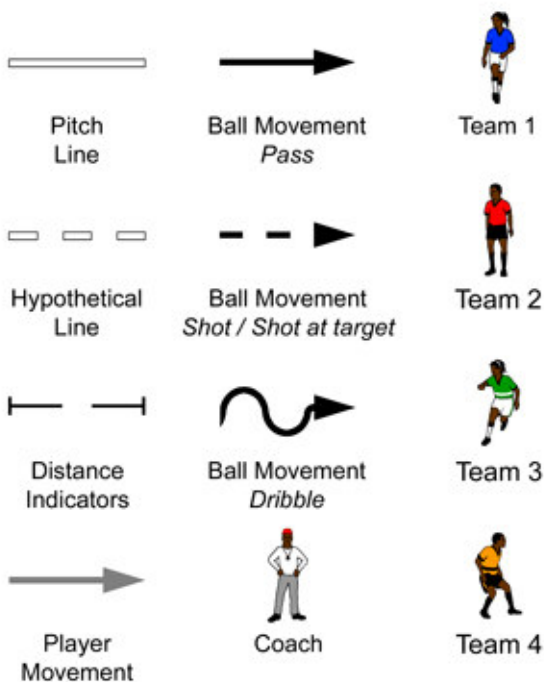
Hi there!

I'm **Edwin**, the Life Skills Meerkat. I'll give you helpful hints concerning Life and Social Skills in Football. So whenever you see me, be sure to take note of what I have to say, as it might just make the difference between a good coach and an excellent coach!

Together we will **Educate and win!**



UNDERSTANDING THE DIAGRAMS



Introduction

The YDF Manual for Environmental Awareness that is now available is consistent in its expansion of the 'Youth Development through Football' concept. If the foundation module – the YDF manual for Coaches – still constitutes the first introduction to the complex topic of environmental awareness, then this manual builds on the different forms of reaction that are possible and elaborates in detail on tips for taking action.

The general basic training that the coaches undergo forms a foundation (a foundation that is useful but not absolutely necessary) that enables them to work with the manual under discussion here. The YDF Manual for Environmental Awareness can therefore also be used as a direct point of entry into methodology. Here too we use the popularity, attractiveness and power of the sport football to teach social skills to the young girls and boys and influence them positively.

Taking our lead from Nelson Mandela who said

'The challenge is to move from rhetoric to action',

we also pay particular attention here, as we did in the first coach-training module, to the practical applicability for coaches and careers with varying degrees of knowledge.

In the process, we consider the full range of approaches that football offers:

- From taking the **individual situation** of each player into account.
- And making use of the connective power of **group experiences and identities within the team**.
- Through to using different **forms of enactment** which are geared towards staging local circumstances in the communities.

Football can provide support and concepts for taking action at all these levels. What appears at first glance to be an extremely difficult notion is presented here in a manner that is both understandable and extremely vivid. Even coaches with limited experience will find practical information and action-taking tips that can be implemented and used immediately.

We hope that this Manual will serve as an advisor; one that will assist in meeting the challenges that arise in reality, and one that will provide answers that can be applied in daily practice.

Our environment is under threat and the challenges it is facing have a direct impact on our lives. A coach is only able to meet the resulting demands to a limited extent. Certainly, he/she should learn how he/she can contribute to and educate for a healthy environment. However, in some situations it might be advisable to involve specialists who can assist with their expertise and experience in protecting the environment.

The first step involves learning what the role of the YDF coach is in raising awareness for environmental protection. It shows how relevant the coach can be to educate young people about the importance of a healthy environment and how we all can contribute to that. Therefore coaches will be equipped with an understanding of environmental matters and the challenges our environment is facing today. A special focus is thereby drawn on climate change and global warming.

In the following chapters we have a closer look at the three elements of air, water and soil. We specifically highlight their importance for our everyday life and how these elements are under threat. Moreover we emphasize the relevance of biodiversity and the variety of life on earth that needs to be protected.

Then we draw the bow a little further and introduce strategies to address threats to the environment. There are many ways in how we all can contribute to protecting our environment through individual activities and actions taken by the football team and community.

Each participant will leave the seminar with a very personal plan which he/she himself/herself has drafted, which is relevant to him/her, and which contains concrete goals to strive for. In this plan and based on own individual situation, a participant will formulate measures to implement that will enable him/her to support environmental awareness raising amongst children and youth and to contribute to a healthy environment.



OVERVIEW OF LESSONS

Basic Training Level

Name of Lesson	Learning Aim	Time
<p><u>Lesson 1</u></p> <p>Roles & Responsibilities of a YDF Coach</p> <ul style="list-style-type: none"> ☞ The Roles, Responsibilities and Qualities of a YDF Coach ☞ Protecting the Environment and Addressing Climate Change ☞ The YDF Coach's role in being an advocate for Environmental Protection. ☞ Using football games and activities to teach about the environment and climate change. 	<p>This lesson asks coaches to consider their wider role in developing the youth they work with. This includes their role in developing the socio-psychological characteristics of young people and in developing young people that care about themselves, their families, communities and their environment. This lesson enables coaches to consider the environment, and the threats to it including the threat of climate change. Coaches are also encouraged to start thinking about their role in educating youth to care about the environment.</p> <p>Furthermore, this lesson asks coaches to look at planning football activities that teach youth about the environment and about climate change.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ Identify the different roles, responsibilities and qualities of a good coach. ☞ Explain what the environment is and what climate change is. ☞ Describe the coach's role in being an advocate for environmental protection and in addressing the challenges of climate change. ☞ Plan, deliver and evaluate football activities that teach youth important messages about the environment and climate change. 	<p>3 hrs</p>
<p><u>Lesson 2</u></p> <p>Air</p> <ul style="list-style-type: none"> ☞ Air pollution and the threat to health ☞ How climate change and other factors are impacting on the quality of our air ☞ The impact of air pollution in Sub-Saharan Africa ☞ What individuals, teams and communities can do to address the threat of air pollution. 	<p>This lesson focuses coach's attention on one of the three elements essential for life on earth - clean air. The lesson highlights the threats of air pollution to people's lives. The lesson examines how pressure on the environment and climate change creates air pollution and how this might be impacting the lives of people living in Sub-Saharan Africa. The lesson encourages coaches to identify things that the individual, team and community can do to address challenges to the quality of our air.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ Describe the importance of air to life. ☞ Explain how climate change and other threats to our environment are impacting on the quality of the air. ☞ Explain the potential impact on Sub-Saharan Africa of threats to the quality of the air. ☞ Identify what individuals, teams and communities can do to address threats to the quality of our air. 	<p>1 hr 30 min</p>

Day 1

Day 1



Basic Training Level

Name of Lesson	Learning Aim	Time
<p>Lesson 3</p> <p>Water</p> <ul style="list-style-type: none"> ☞ The importance of water to life ☞ How climate change and other factors are impacting on the availability of water ☞ The impact of water shortages in Sub-Saharan Africa ☞ What individuals, teams and communities can do to address the threat to water supply. 	<p>This lesson focuses coach's attention on one of the three elements essential for life on earth - water. The lesson highlights the importance of people being able to access clean water. The lesson examines how pressure on the environment and climate change are threatening the availability of adequate and safe water supplies. The impact of shortages of clean water on Sub-Saharan communities is also considered together with the dangers that accompany contaminated water. The lesson encourages coaches to identify things that the individual, team and community can do to address challenges to water.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ Describe the importance of water to life. ☞ Explain how climate change and other threats to our environment are impacting on the availability and quality of water. ☞ Explain the potential impact on Sub-Saharan Africa of threats to the availability and quality of water. ☞ Identify what individuals, teams and communities can do to address threats to quality and availability of water. 	<p>1 hr 30 min</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Day 2</p>
<p>Lesson 4</p> <p>Soil</p> <ul style="list-style-type: none"> ☞ The importance of the soil to life ☞ How climate change and other factors are impacting on our soil ☞ The impact of damage of our soil in Sub-Saharan Africa ☞ What individuals, teams and communities can do to protect our soil. 	<p>This lesson focuses coach's attention on one of the three elements essential for life on earth - the soil. The lesson highlights the importance of the soil to food production and to people's health. The lesson examines how pressure on the environment and climate change are threatening the quality of soil in particular in Sub-Saharan Africa. The lesson encourages coaches to identify things that the individual, team and community can do to address challenges to soil quality.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ Describe the importance of the soil to life. ☞ Explain how climate change and other threats to our environment are impacting on soil. ☞ Explain the potential impact on Sub-Saharan Africa of threats to soil. ☞ Identify what individuals, teams and communities can do to address threats to soil. 	<p>1 hr 30 min</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Day 2</p>

OVERVIEW OF LESSONS

Basic Training Level

Name of Lesson	Learning Aim	Time
<p><u>Lesson 5</u></p> <p>Biodiversity</p> <ul style="list-style-type: none"> ☞ Why biodiversity is important to us ☞ How climate change and other factors are impacting biodiversity ☞ The threat to biodiversity in Sub-Saharan Africa ☞ What individuals, teams and communities can do to protect biodiversity 	<p>This lesson explains what biodiversity is and why it is important to life on our planet. The lesson asks coaches to consider how climate change and other environmental factors are impacting on biodiversity. Threats to biodiversity in Sub-Saharan Africa are considered and coaches encouraged to identify things that the individual, team and community can do to address threats to biodiversity.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ Explain biodiversity and why it is important. ☞ Describe how climate change and other threats to our environment are impacting on biodiversity. ☞ Explain the potential impact on Sub-Saharan Africa of damage to its biodiversity. ☞ Identify what individuals, teams and communities can do to promote biodiversity. 	<p>1 hr 30 min</p>
<p><u>Lesson 6</u></p> <p>Practical Environmental and Climate Change Actions</p> <ul style="list-style-type: none"> ☞ Examples of local good practice in contributing to environmental protection ☞ Proposals for actions by individuals, teams and communities to promote protection of the environment. 	<p>This lesson asks coaches to look at practical examples of things young people, football teams/programmes and local communities can do that will make a contribution to protection of our environment and to climate change. This lesson will focus on successful strategies that are being adopted in African communities to address environmental issues. Coaches will be encouraged to contribute their own ideas as to how we can protect the environment and address climate change.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☞ List practical actions that individuals can take to help protect our environment and address climate change. ☞ List practical actions that teams can take to help protect our environment and address climate change. ☞ List practical actions that communities can take to help protect our environment and address climate change. 	<p>1 hr 30 min</p>

Day 2

Day 2 and Day 3



Basic Training Level

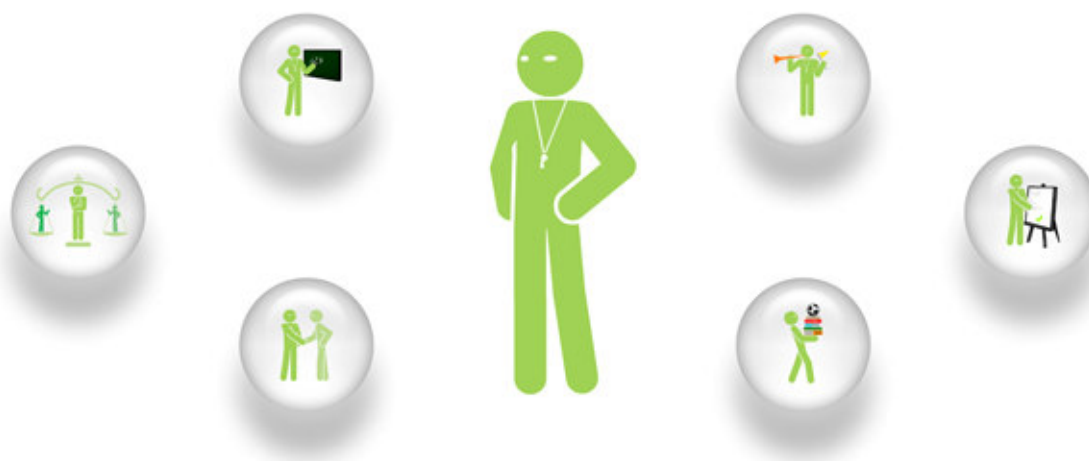
Name of Lesson	Learning Aim	Time
<p><u>Lesson 7</u></p> <p>Conclusion, Reflection & Action Planning</p> <ul style="list-style-type: none"> ☛ Reflection ☛ Action Planning ☛ Evaluation of the workshop 	<p>This lesson concludes the workshop and affords the participants the opportunity to reflect on what they have learned. Reflection is turned into action by planning concrete steps towards individuals, teams and communities promoting environmental protection. The lesson also allows time to complete evaluation sheets.</p> <p>By the end of this lesson the participants shall be able to:</p> <ul style="list-style-type: none"> ☛ Plan how they as a coach will use the knowledge they have gained to become an advocate of environmental protection in their community. ☛ Plan how they will integrate environmental protection into their football programmes and how they will educate youth on environmental protection. ☛ Reflect on the workshop content and delivery and provide feedback on these to the organisers. 	<p>1 hr 30 min</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Day 3</p>

Roles & Responsibilities of a YDF Coach

Roles of a Youth Football Coach

The coach roles and responsibilities are of particular importance and go beyond teaching football skills. In fact, the coach acts as a role model and as an educator to develop as a young person. Hence, the roles a coach is taking over is multifaceted and it comes along with different responsibilities. Among these are the responsibility for assessing the young person's level of ability, providing instruction that helps them develop their skills, and providing motivation to them. Coaches are a performance analyst, a teacher, a motivator.

Moreover, the coach plays important roles in guiding the youth in life and their chosen sport. Thereby, the roles will be varied from assessor, teacher, motivator, friend, mentor, facilitator, demonstrator, adviser, supporter, fact finder, counsellor, organizer, and a planner.



Responsibilities of a Youth Football Coach

When someone undertakes to coach football to youth, they assume a range of responsibilities as a coach.

These responsibilities include:

- ☞ Ensuring the health and safety of the young people participating in activities you lead;
- ☞ A duty of care for young people that includes protecting children from abuse;
- ☞ Ensuring the balanced long term development of the young person taking into account their physical, technical, psychological and social needs;
- ☞ Continuing to update your own knowledge of football and football coaching;
- ☞ Planning and evaluating your coaching sessions;
- ☞ Providing opportunities for youth to play football and have fun;
- ☞ Involving young people in decision making around their own participation;
- ☞ Development of the Youth Football Player.

Roles & Responsibilities of a YDF Coach

Development of the Youth Football Player

One of the responsibilities of a youth football coach is the long term development of the player. This means developing the young person in terms of their technical / tactical skills, their physical fitness, their mental or psychological fitness, and their social skills.



All Round Development of the Youth Footballer

Roles & Responsibilities of a YDF Coach

Environmental Awareness through Football

The Youth Development through Football programme seeks to develop youth, boys and girls, holistically not just as footballers. This involves developing their social skills so that as they progress through life they can make the right choices for themselves, their families and their communities. Through football we hope to develop positive behaviour and to equip young people with knowledge that helps youth make the right choice.

Climate change and other threats to our environment are impacting on everyone's life and people around the world need to become more aware of environmental matters and challenges. People in developing countries will be most affected by these environmental challenges. Included in the knowledge that we as YDF football coaches can impart to youth, is an awareness of the environment, the threats posed by climate change and other environmental challenges, and knowledge of what we can all do to help protect our environments and way of life.

The aim of this manual is to equip YDF coaches with an understanding of environmental matters and teach them ways of increasing environmental awareness in youth through the medium of football.



Environmental Education

Children have a right to expect that they will grow up and live healthy lives in a healthy environment. Healthy environments can only be achieved and sustained if people, both individually and collectively, behave in a way that supports, develops and sustains those environments. Through football we can educate young people about the environment enhancing:

- Awareness and sensitivity of the environment and environmental challenges
- Knowledge as well as understanding about environmental challenges
- Transformation of attitudes towards a quality environment and developing skills in order to reduce environmental problems
- Participation in activities that protect the environment



Roles & Responsibilities of a YDF Coach

What is the Environment?

The word "environment" is most commonly used to describe the "natural" environment which includes all the living and non-living things that surround us. Our environment consists of the biological - humans, animals, plants and the non-biological - the heat from the sun, the air, the water, and the soil.



Our world is made up of a variety of habitats or ecosystems that support a diversity of animal and plant life. If you consider the many different habitats around the world such as the Polar Regions, Coniferous Forests, Temperate Forests, Tropical Forests, Grasslands, Deserts, Mountains, Oceanic Islands, Freshwater Wetlands, and Oceans, these support a great diversity of animal and plant life.

Changes occur naturally in to the environment and different species living in different habitats gradually adapt to these changes. However, since the industrial revolution, our environment has been rapidly changing and at such a rate that many life forms have been unable to adapt and have been driven towards extinction.

These changes continue to accelerate today and life as we know it is under threat.

Challenges to the Environment

Some of the challenges the environment faces are being driven by the actions of humans and their drive to exploit the world's natural resources. They include:

- ❖ Overuse of natural resources that are not renewable
- ❖ Deforestation (in Africa 29 trees are cut for everyone that is planted)
- ❖ Desertification of land due to overgrazing, harmful agricultural practices, or deforestation
- ❖ Over fishing of the seas
- ❖ Pollution
- ❖ Global Warming & Climate Change



Roles & Responsibilities of a YDF Coach

Energy Challenges

Much of the environmental damage that has been done to our world is linked to our increasing need for energy.

The world relies on sources of energy that are a) heavy polluters and b) come from non renewable sources. These are:



Oil



Coal



Natural Gas



Nuclear

Alternate sources of fuel which are renewable and are non-polluting or less polluting are currently under-exploited. These include:



Hydro-Power



Solar-Power



Biomass



Wind-Power



Tidal-Power



Geothermal Power

Pollution

Carbon fuels (Oil, Coal and Gas) are major sources of pollution and although Nuclear fuel is deemed to be source of clean energy, accidents at reactors have led to radioactive pollution and resultant impacts on the health of people affected.

The petro-chemical industry is also a source of pollution and many of their end products become pollutants later in their life i.e. plastic products, waste chemicals, etc.

The major sources of pollution are:

- ☛ Chemical Waste Pollution contributed to by increasing amounts of household consumption leading to increased waste and poor waste management;
- ☛ Solid Waste Pollution;
- ☛ Water Pollution - Industrial / Agricultural / Cities / Oil and other chemical spills;
- ☛ Radiation Pollution - used nuclear cores / uranium tailings / waste generated by hospitals, universities, and industrial plants;
- ☛ Air Pollution - Acid Rain / Global Warming.



Roles & Responsibilities of a YDF Coach

Global Warming

Humans are causing global warming through air pollution!

They are increasing **Carbon Dioxide** in the atmosphere by burning fossil fuel, through deforestation, and through failing land and ocean sinks (natural systems that stores carbon over thousands of years such as peat bogs and the Arctic Tundra).



Methane is being released through food production (Cattle and Rice Paddies), the Arctic Tundra and melting Clathrates (ice-like structures in the cold northern bogs and the bottom of the seas).

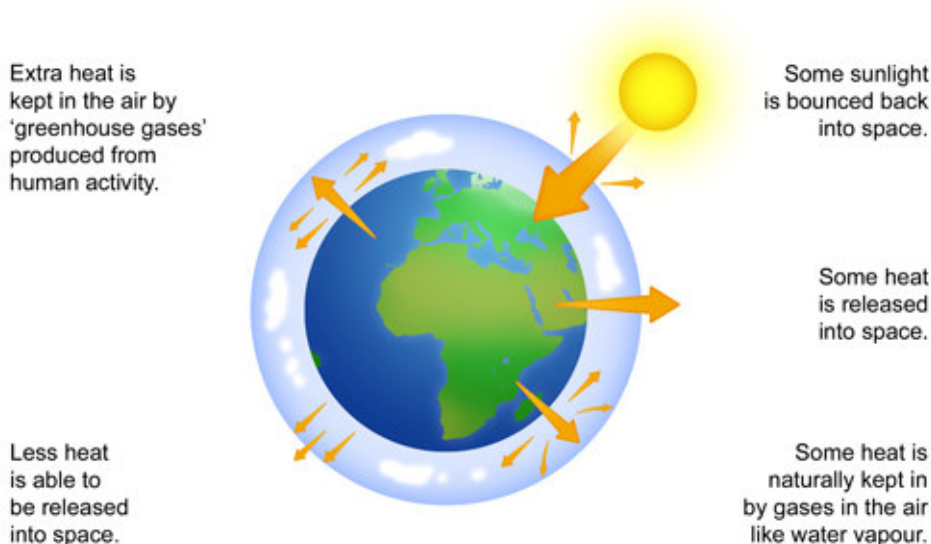
Nitrogen Oxides from farming.

Other Gases - **CFCs** and **HCFCs** (chlorofluorocarbons and hydrochlorofluorocarbons) from refrigeration and air cooling systems, aerosols and solvents.

These gases are no longer being absorbed or resynthesised naturally and are rising into the upper levels of the atmosphere. There they are creating an increased **greenhouse effect** helping to trap more heat and causing the globe to increase temperature. This effect is called **global warming** and it is causing **climate change**.

Climate Change

The following diagram shows how the Sun heats the Earth. Some sunlight gets reflected back into space by the atmosphere and some is absorbed. The Earth absorbs some heat, and at night some heat is released back into space. Some heat is kept in the atmosphere naturally by gases in the air like water vapour (the greenhouse effect).



LESSONS 1

Roles & Responsibilities of a YDF Coach

Increased pollution from human activity has led to increased (greenhouse) gases in the upper atmosphere. These gases cause less heat to be released back into space and as a result are warming up the planet. This global warming is driving changes to our climate.



Climate change is a lasting change in weather patterns. Increased global temperature is melting glaciers and ice caps resulting in the release of more greenhouse gases and in rising sea levels. Severe weather events such as hurricanes, storms, flooding, droughts, etc are increasing. Climate change is impacting food security, water availability, land erosion, health, and biodiversity.

The average temperature of the earth's surface has risen by 0.74°C since the late 1800s. It is expected to increase by another 1.8°C to 4°C by the year 2100. This is considered to be a rapid and profound change that requires urgent action.

The climate is changing because of a century and a half of industrialization, which has included the burning of fossil fuels, cutting of forests, and certain farming methods. These activities have increased the amount of "greenhouse gases" in the atmosphere, which are the main contributors to climate change. **In line with the world warming at an alarmingly fast rate, global emissions of all greenhouse gasses have increased by about 70% between 1970 and 2005.**

Climate change is more than an environmental threat - it is the major, overriding environmental issue of our time. It is a threat to our social structures, our families and our lives. It is important for everyone to take action now.



Roles & Responsibilities of a YDF Coach

Environmental Education and Football

Youth football coaches need to be sensitized to the importance the environment plays in everyday life and how everyone can contribute to reduce environmental problems. They should also be aware of their responsibility to be an adult role model and to demonstrate behavior that is in line with the protection of the environment. Thereby, it is important to provide youth with the relevant information about the environment and how to protect it. Youth coaches should be able to talk their players about the environment and environmental challenges. Coaches are significant adult influences in their player's life and should use these to motivate youth for an environment friendly behavior. Being an advocate for environment protection coaches can not only influence the players but also the community.

The coach is especially requested to:

- ☞ Raise awareness for environmental issues
- ☞ Establish environmental issues as a topic of concern for the youth; highlight expected consequences without behavioral change
- ☞ Create a sustainable interest in environmental issues



Forms of environmental unfriendly behavior in football:

- ☞ Using high quantity of water while showering after trainings
- ☞ Using high quantity of water while watering the pitch



- ☞ Littering the playground and the surroundings during tournaments
- ☞ Using many cars to get to tournaments

Roles & Responsibilities of a YDF Coach

Structuring Sessions to deliver Environmental Education

YDF coaches should consider the following points when planning a training session:

- ☞ Clarity / Framework
- ☞ Decide on the focal point
- ☞ Build-up of training session
- ☞ Select game and exercise format
- ☞ Decide on organisation of training
- ☞ Plan training and break time

What focal points should YDF Coaches decide on if they are delivering a football session that aims to develop football skills and deliver a message around environmental awareness?

- ☞ The content of the training session should combine both a technical focal point and message for environmental awareness.
- ☞ One technical focal point should be selected per training session. Although the session is aiming to deliver a message around environmental awareness it should still have a technical focal point. This enables messages around environment protection to be delivered whilst continuing to develop the football skills of the young people being trained.
- ☞ The training of technical focal points should be changed on a weekly basis. Moreover, games or activities around the same focal point should vary.
- ☞ Varied movement exercises should be incorporated in every training session.
- ☞ Children easily learn the tactical basics during the playing of small football games! There is no need for isolated tactical training.






Roles & Responsibilities of a YDF Coach

YDF Coaches will structure training sessions to include warm up, main part, conclusion, and cool down. Coaches should consider how they can plan sessions to develop a football skill and deliver a message around environmental awareness.



Environmental awareness messages can be included in every aspect of a training session or can be focused on one aspect i.e. the Warm Up.

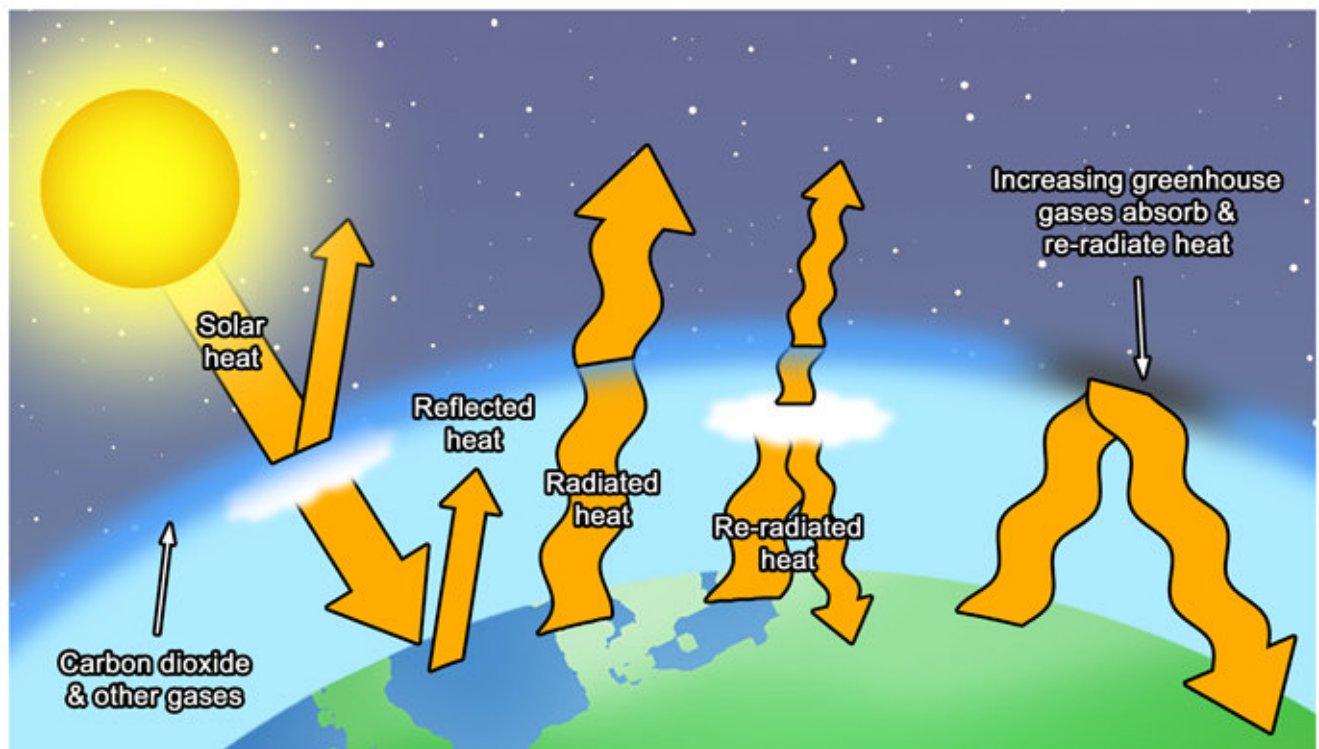
TIME	PHASE	CONTENTS
	WARM UP	<ul style="list-style-type: none"> Welcome and Joint Warm-Up Variation of Movement Individuals working with the ball Opportunity to introduce environmental awareness
	MAIN PART	<ul style="list-style-type: none"> Changing of games and exercises of the same technical focal point Opportunity to introduce environmental awareness or to develop theme from Warm-Up
	CONCLUSION	<ul style="list-style-type: none"> Integrate technical focal point from Main Part Play football Play an environmental awareness activity Wind up with discussion - football, environmental awareness or both
	COOLING DOWN	

Air

Air is the name given to that part of the Earth's atmosphere that contains oxygen used by most organisms for respiration and carbon dioxide used by plants, algae and cyanobacteria for photosynthesis.

The atmosphere of Earth is a layer of gases surrounding our planet that is retained by gravity. The atmosphere protects life on Earth by absorbing ultraviolet solar radiation, warming the surface through heat retention (greenhouse effect), and reducing temperature extremes between day and night.

The greenhouse effect is illustrated in the following diagram. The Sun's rays warm the earth through solar radiation penetrating the carbon dioxide and other greenhouse gases in the upper reaches of our atmosphere. Some heat is adsorbed by the earth and oceans, some is reflected back to space and some radiates back to space. Some of the heat being radiated back to space is trapped by the layer of greenhouse gases. This works like a greenhouse where the sun's rays penetrate the glass of the green house to heat it up and where the glass then traps that heat in the greenhouse. As more greenhouse gases collect in the upper atmosphere the less heat that can escape the earth and so global temperatures are gradually rising. It is these small temperature rises that are causing our climate to change.

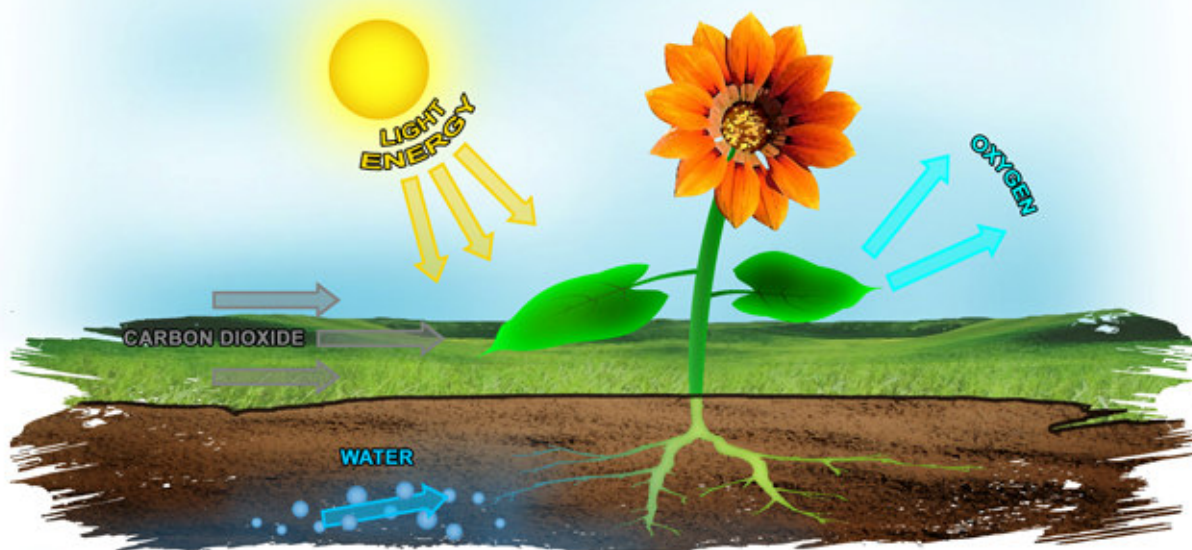


Air contains nitrogen (78.09%), oxygen (20.95%), argon (0.93%), carbon dioxide (0.039%), and small amounts of other gases. Air also contains a variable amount of water vapor, on average around 1%. Air suitable for the survival of terrestrial plants and animals is only exists at the lowest levels of the Earth's atmosphere.



Humans and animals require oxygen contained in the air they breathe for life and exhale carbon dioxide as a product of respiration. Plant life absorbs carbon dioxide and through a process called photo-synthesis produces oxygen which is released back into the air. For life to exist we need both animal and plant life to co-exist.

Basic Photosynthesis



Air Pollution

Air pollution is the introduction of chemicals, particulate matter, or biological materials that cause harm or discomfort to humans or other living organisms, or cause damage to the natural environment or built environment, into the atmosphere.

The atmosphere is a natural system that is essential to support life on our planet and air pollution is disturbing the balance of this system. Air pollution represents a health hazard to all living things. Indoor air pollution and urban air quality are two of the world's worst pollution problems. Air pollution is also causing global warming and the resultant climate change is threatening the earth's ecosystems.

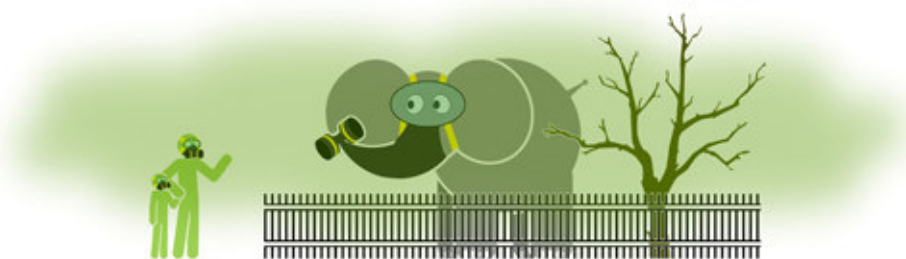
Air Pollution & Health

Air pollution can affect our health in many ways with both short-term and long-term effects. The extent to which an individual is harmed by air pollution usually depends on the total exposure to the damaging chemicals, i.e., the duration of exposure and the concentration of the chemicals must be taken into account.

LESSON 2

Air

Population groups vulnerable to the effects of air pollution include infants, children, the elderly, and people who exercise, work and/or are physically active outdoors. Hence, football players are particularly affected by air pollution.



Examples of **short-term effects** include:

- ☞ irritation to the eyes, nose and throat
- ☞ headache
- ☞ allergic reactions
- ☞ upper respiratory infections such as bronchitis and pneumonia

Long-term health effects can include:

- ☞ chronic respiratory disease
- ☞ lung cancer
- ☞ heart disease
- ☞ damage to the brain, nerves, liver, or kidneys



The World Health Organization estimates that globally some 2.4 million people die each year from causes directly attributable to air pollution.

Air Pollution & Football

Footballers develop their fitness so that they can increase their ability to absorb oxygen from the air they breathe. This allows them to produce more energy and to perform better on the football field. At the Beijing Olympic Games, concerns that air pollution would impair the performance of players and potentially harm their health, led to the city closing down industries and controlling the numbers of motor vehicles on the roads for the duration of the Olympics.

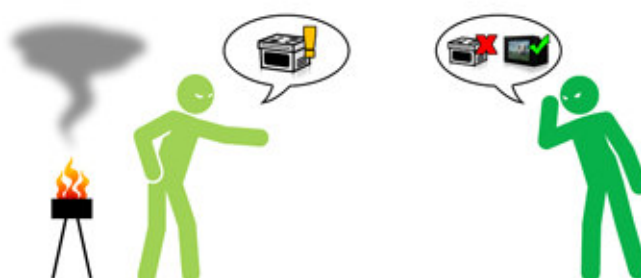
Indoor Air Pollution

Indoor air pollution is a big issue that affects people's health and people living in poverty may be more vulnerable to indoor air pollution as they may lack the means of addressing this risk.

Indoor cooking and heating with biomass fuels (agricultural residues, dung, straw, wood) or coal produces high levels of indoor smoke that contain a variety of health-damaging pollutants. There is consistent evidence that exposure to indoor air pollution can lead to acute lower respiratory infections in children under five, and chronic obstructive pulmonary disease and lung cancer (where coal is used) in adults.



Dependence on polluting and inefficient household fuels and appliances is both a cause and a result of poverty. In most developing countries, it is women who collect fuel and carry out household tasks. Women are therefore particularly affected by indoor smoke and time loss due to simple fuel use. However, in many homes, men appear to have more decision-making power, and household energy needs may be given lower priority than women would wish.



The reliance on wood as fuel can put considerable pressure on forests, particularly in areas where wood fuel is scarce and the demand for wood outweighs natural re-growth. Biomass stoves used in developing country homes typically have a low efficiency. As a result, a large percentage of the fuel energy is lost as products of incomplete combustion (PICs). These PICs include the gas methane which has a greenhouse effect many times greater than CO₂.

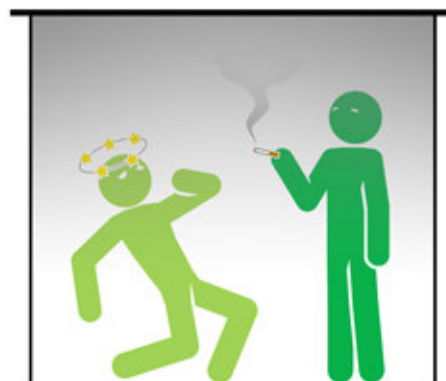
Smoking also causes air pollution that can damage health. In many countries it is now illegal to smoke in unventilated public places. Footballers should avoid smoking as it affects your ability to take up oxygen needed to produce the energy players need to play to the best of their ability. Long term it will also damage your health. Football clubs should have a no smoking policy.

Air

Addressing Indoor Pollution

The most effective way to protect your family and yourself from indoor air pollution is to prevent or minimize the release of pollutants indoors in the first place.

- ☞ Use products such as cleaning agents, paints, and glues safely. Follow instructions, ventilate well and use masks.
- ☞ Do not allow smoking indoors.
- ☞ Use gas appliances, wood stoves, and fireplaces only as intended.
- ☞ Provide adequate ventilation.
- ☞ Use energy efficient, low polluting sources for heat and for cooking food.

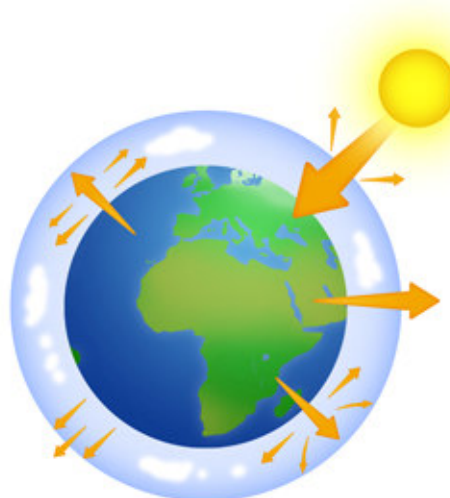


Air Pollution and Climate Change

Air pollution caused by humans is causing global warming and resultant climate change. Carbon dioxide from the burning of fossil fuels i.e. coal, oil and natural gas, methane from animal farming and rice paddies, nitrogen oxides from farming, and other gases from industrial pollution such as CFCs and HCFCs (chlorofluorocarbons and hydrochlorofluorocarbons) are creating a greenhouse effect that is warming up the Earth.

Extra heat is kept in the air by 'greenhouse gases' produced from human activity.

Less heat is able to be released into space.



Some sunlight is bounced back into space.

Some heat is released into space.

Some heat is naturally kept in by gases in the air like water vapour.

Earth's natural greenhouse effect makes life as we know it possible. However, human activities, primarily the burning of fossil fuels and clearing of forests, have greatly intensified the natural greenhouse effect, causing global warming. The sun radiates heat towards the earth. Half of this heat is absorbed by the earth, the other half is either reflected back or absorbed by the atmosphere. Increased air pollution is causing more heat to be trapped by the earth's atmosphere which in turn is causing global warming and resulting climate change.



Air

Energy production and transport account for much of the world's energy consumption. In developing countries increasing demands for energy and transport will help push up the amounts of carbon dioxide being released into the atmosphere.

At the same time the increasing demand for timber for paper making and construction is leading to deforestation which is reducing the capacity of the earth's trees to absorb carbon dioxide and to resynthesize it back into oxygen.

Gases trapped in glaciers and the ice caps are also being released as the ice melts due to global warming exacerbating the situation.

Acid Rain



One of the effects of air pollution is to make the rain more acidic. Acid rain is in turn having a harmful effect of plants needed to reduce carbon dioxide and produce oxygen. Acid rain is also falling on lakes, rivers and the ocean and is endangering natural species as the acidity of water is increased.

Radioactivity



Nuclear energy production is also a potential polluter of our air. Disasters and accidents involving nuclear energy plants have led to higher radiation levels spread through radioactive particulates in the air.

LESSON 2

Air

Addressing Air Pollution

Air pollution is mainly the result of human activity so there are small things we can do every day that can help reduce air pollution and hence improve the protection of the environment as well as human health.

- ☞ Save electricity! Don't leave your electronic devices on stand-by mode. Less electricity consumed means less power produced and fewer pollutants into the air from burning of fossil fuels. Football teams can play day games, it saves burning energy using floodlights.
- ☞ Recycle paper, plastic, glass bottles, cardboard and aluminum cans. (This conserves energy and reduces production emissions.) Make sure that during football tournaments waste is separated in order to recycle it.
- ☞ Don't burn rubbish or green waste. Start recycling and composting instead.
- ☞ Reuse materials like paper bags and boxes when you can.
- ☞ Keep woodstoves and fireplaces well maintained.
- ☞ Everything you buy has an effect on the environment. As a consumer you make a difference in what kind of products are in demand and produced. Choose recycled products and products that have less packaging and are reusable. Think twice before buying that new fashionable piece of football kit. Do you really need it?
- ☞ Make choices that reflect your concern for the environment by choosing products with the Recycled or Ozone friendly logo.



Driving releases harmful chemicals and other air pollutants into the air, so we can consider:

- ☞ Using public transport, join a lift club, walking or riding a bike. Football players should consider how they travel to matches. If everyone is taking separate transport, would it be possible to arrange shared team transport?
- ☞ Driving less, especially during peak traffic periods or on hot days.
- ☞ Purchasing local produce as the transporting goods from one side of the world to the other generates a lot more air pollution than transporting them short distances. Try to buy locally produced goods and eat local foods that are in season. Ask the local textile manufacturer to make you football bibs rather than importing them from abroad.
- ☞ When working with our football teams / squads we can consider asking players that are travelling from further away to the pitch, to make sure that they ride their bikes, or use public transport, or share transport.



When working with our football teams / squads:

- Make them aware of climate change and how air pollution is causing global warming.
- Make players and supporters aware of their carbon footprint and ask them to take action to make the footprint lighter.
- Ask the players to share transport where ever possible or use a bicycle or run or walk to training / matches.
- Promote a no smoking culture.



When we are travelling to the match we should all travel together, that way we will burn less energy, and will reduce our carbon footprint.

As YDF coaches we can raise awareness of air pollution among the families, peers, youth and communities. We can become advocates for action against climate change:

- Encourage your school system and local government to promote action to reduce our carbon footprint.
- Promote "Meat Free Mondays", "Earth Hour" and other campaigns designed to reduce our emissions of greenhouse gases.
- Raise awareness about how we can all help address global warming.

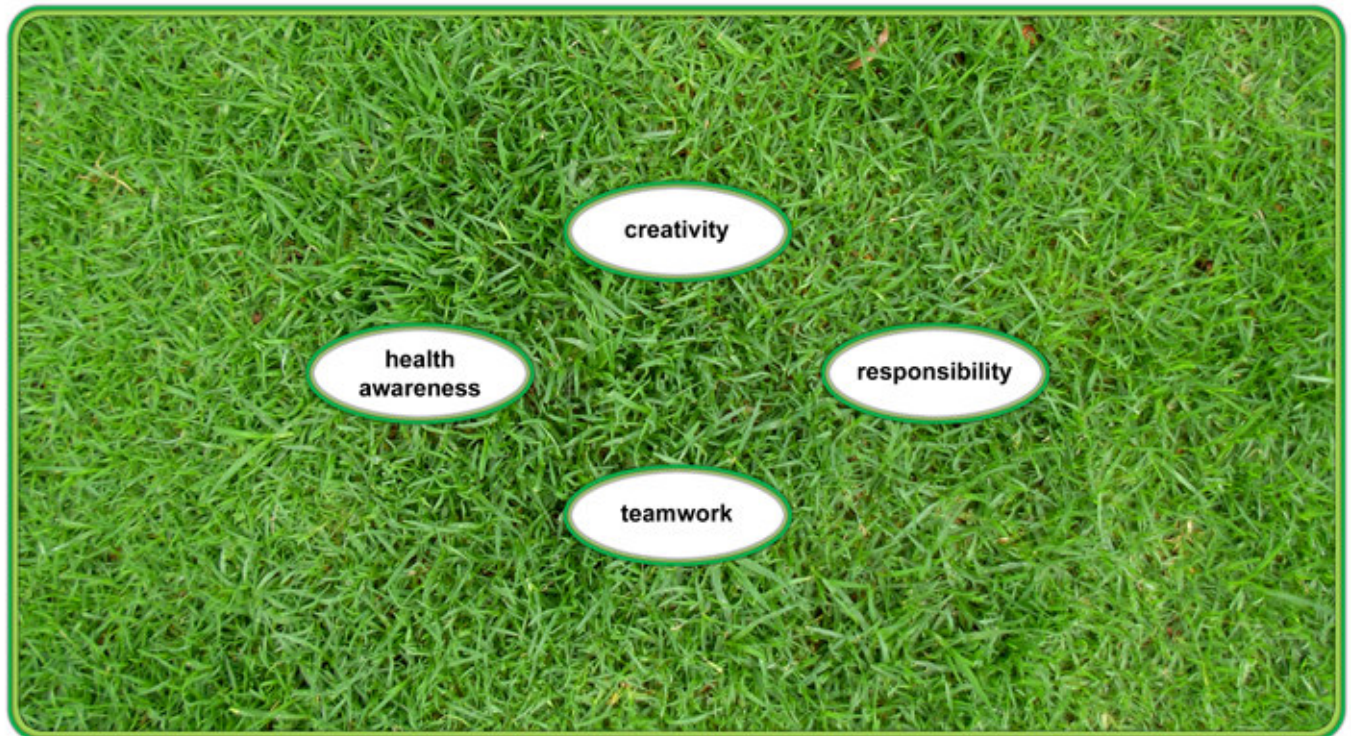
LESSON 2

Air

Football Exercises

Using Football Exercises regarding the Topic

The Life Skills listed below will be focused on in this lesson.
They are incorporated in the Football Exercises on the following pages.



Types of Equipment useful for these Exercises



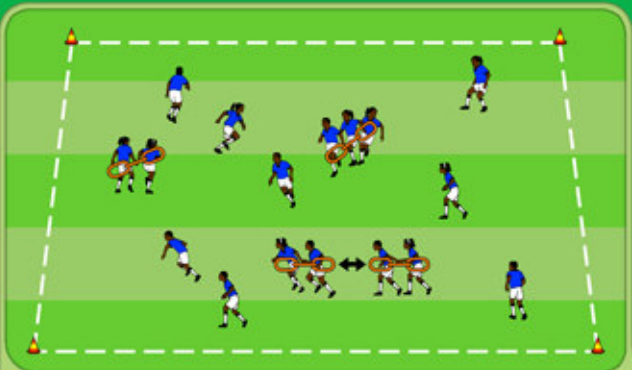
Air Football Exercises



Introduce the training / exercises with the following:

"Clean air is obviously vital! ..."

EXERCISE 1 A



Motivating Story

The catcher is an air polluter. He gets more and more players on his side so that in the end no one has the chance to get away from the polluted air.

"Catch Games"

- ☞ All the players are in a square with one catcher.
- ☞ This catcher has to tag the other players.
- ☞ The tagged players are now also catchers.
- ☞ The tagged players hold hands, thereby forming a chain, and carry on trying to tag other players.

Variations

- ☞ Tagged players are not eliminated, but have to make a bridge, and are back in the game when another player crawls through the bridge.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

Air

Football Exercises

EXERCISE 1 B

Variation of "Catch Games"

- ☞ There are two catchers, wearing different coloured bibs.
- ☞ These two catchers try to tag as many players as possible.
- ☞ Tagged players are eliminated and can do another exercise outside the square until all the players are eliminated.
- ☞ Players may not be tagged if they are standing at a cone.

Variations

- ☞ Tagged players are not eliminated, but have to make a bridge, and are back in the game when another player crawls through the bridge.



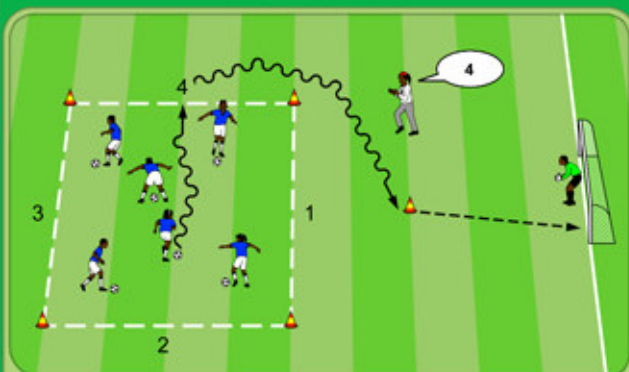
The two catchers are different sources of pollution.

One, for example, is a car driver with a broken exhaust, the other one burns refuse.

More and more people are caught in the polluted air, except for those people standing at a tree, because trees are very important...

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

EXERCISE 2



It is important to be aware that nature may not be destroyed. Only who heeds this may shoot a goal.

"Be careful"

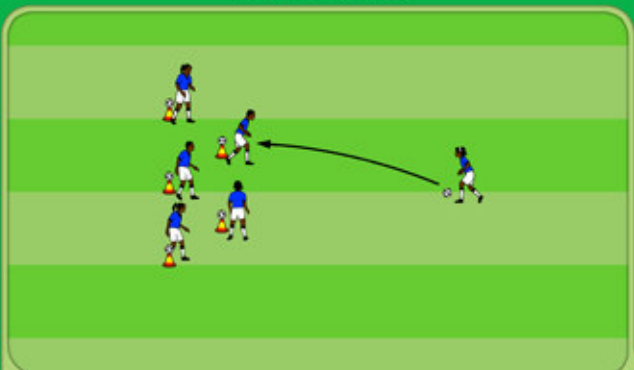
- ☞ All the players dribble in the playing field.
- ☞ The coach gives them different exercises, e.g. only with left, right ...
- ☞ The coach then calls one player and a number. The player has to dribble across that line as soon as possible.
- ☞ All the other players turn into trees (arms out wide → branches) which the player may not touch.
- ☞ If the player manages to leave the playing field without touching the other players, he/she must run to the cone from where he may shoot a goal.
- ☞ The other players carry on dribbling in the playing field.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN



Air
Football Exercises

EXERCISE 3



Protect the trees from the tree feller.

"Cone Shooting"

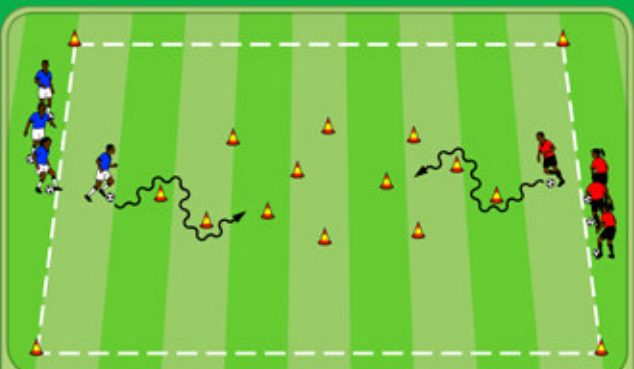
- Every player (except for one → the destroyer) protects a cone with a ball on top.
- The destroyer tries to knock over the cones of the players.
- If he is successful, the other player also turns into a destroyer.

Variations

- Six players are tree fellers and six players are nature conservators.
- The tree fellers have to knock over as many cones as possible in the given time, e.g. one minute. Then the tasks are swapped.
- Which team managed to protect more cones?

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

EXERCISE 4



Saving and protecting our environment is very important for everyone!

The cones symbolize the trees that need to be protected.

"Protecting our trees"

- Two Players from each team dribble through the cones from one side to the other. Then the next two players follow...
- Players are not allowed to touch the cones nor each other.

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

LESSON 2

Air

Football Exercises

EXERCISE 5



This is a good endurance training exercise!

"Handicap Game"

- ☞ There are three teams.
- ☞ Two teams play against each other on the playing field.
- ☞ The third team dribbles around the field.
- ☞ The third team decides how the players on the field have to play, i.e. if the team dribbles or stretches (trees), then the field players can play without any handicaps.
- ☞ If the team should take a ball in the hand (stretched to the front as a steering wheel), the field players may play with two ball contacts only.
- ☞ If the team passes the ball through the cone goals, the field players have to play directly.
- ☞ The tasks are swapped after five minutes.

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

The third team represents the degree of air pollution. If there are a lot of cars driving next to the playing field or someone is burning refuse, the pollution of the air increases and it is more difficult for the field players to score a goal.

Air
Football Exercises

Assignment for the way home and for home:

Note where the air polluters are on your way home or at home.



We shall discuss it at the beginning of the next training.



Water

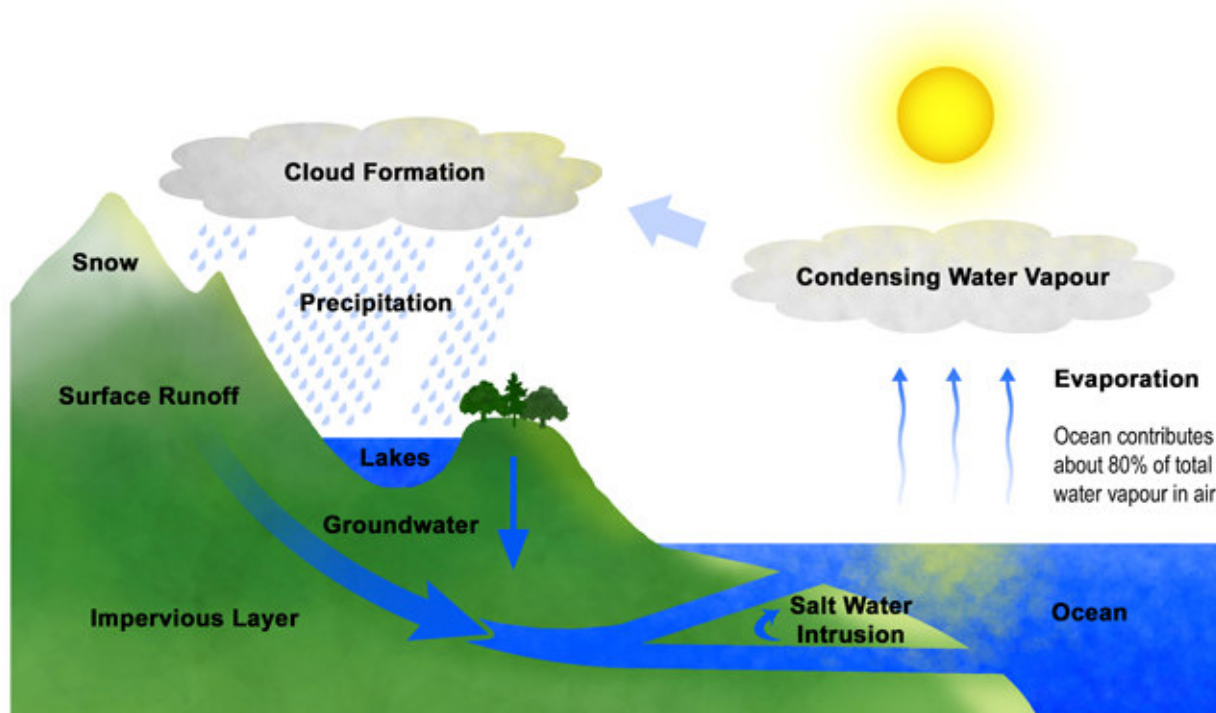
The Blue Planet

Seen from outer space, the earth appears like a shining blue planet as much of it is covered by the water of the oceans. Unlike the other planets in our solar system, the existence of water supports life on Earth as we know it. Without water there can be no life.

All living things need water, plants, animals and us as humans consist mainly of water. 70% of the human body is comprised of water. Plants, animals and human beings would all die of thirst if there was no more water. Humans can only last 8-14 days without water. This is why we say that water is the fountain of life. Depending on what we are doing and how hot it is, humans need 2-4 liters of water per day to survive.

Most of the water, 97.5%, on our blue planet is contained in the Oceans. The other 2.5% which is fresh water is either locked in glaciers (68.9%), is ground water (30.8%) or is in our reservoirs, lakes and rivers (0.3%). Most of our fresh water supplies come from our lakes, rivers and reservoirs. This means that only around 0.5% of the world's water resources are available for man's and ecosystems fresh water needs.

The freshwater we need to support life in our various ecosystems is provided through the **water cycle** (see *diagram below*), also known as the hydrologic cycle. The water cycle consists of the continuous movement of water on, above and below the surface of the earth. Movement of water through the cycle, purifies it and provides the freshwater needed by plants, animals and humans to be replenished. The majority of water (86%) in the cycle is a result of evaporation from the oceans.



Football players need to drink more water than the average person as they lose body fluid through sweat as they are training and playing matches. Dehydration as lack of water in your body affects performance. If a player is not well hydrated they will not play as well as they can. Football players need access to fresh clean drinking water. They should also bring a water bottle to training with them and sip water during training and matches, especially when it is hot or humid.



Water

Water Challenge

The world faces two big challenges regarding water. One is water scarcity and the other is water quality. Unreliable rainfall and increasing demand from agriculture, industries, and towns is leading to water scarcity. Accompanying the increasing shortage of water is the issue of water quality. Water pollution is being caused by industrial effluents, domestic and commercial sewage, acid mine drainage, agricultural runoff and litter.

Ironically, one of the impacts of climate change is may be too much water at times as a result of weather extremes leading to flooding as a result of unpredictable weather and rainfall patterns.

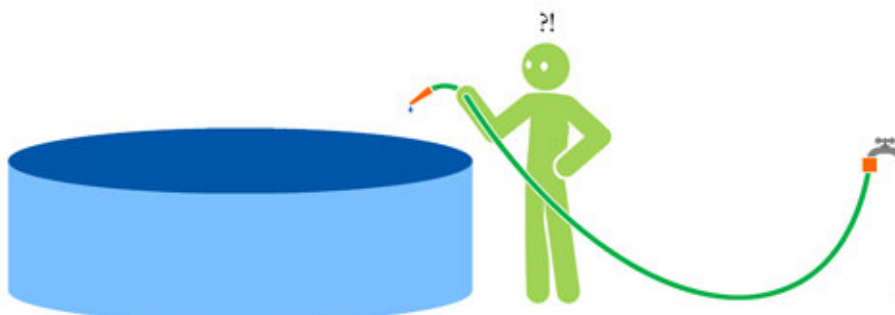


The Impact of Climate Change

With expected impacts on drought, flooding, storms, melting ice and sea-level rise, there is growing evidence that the water cycle is the aspect of the earth system that will be most affected by climate change.

Rising global temperatures will lead to an intensification of the water cycle, resulting in dryer dry seasons and wetter rainy seasons, and subsequently heightened risks of more extreme and frequent floods and drought. Changing climate will also have significant impacts on the availability of water, as well as the quality and quantity of water that is available and accessible. Melting glaciers will increase flood risk during the rainy season, and strongly reduce dry-season water supplies to one-sixth of the world's population.

Vulnerability to climate change is not evenly distributed and there are geographic hot spots where impacts on water are highest and capacity to cope is lowest. South Africa for example is generally a water-scarce country, and it is predicted that demand for water here will exceed supply within the next 15 to 20 years.



LESSON 3

Water

Water Scarcity

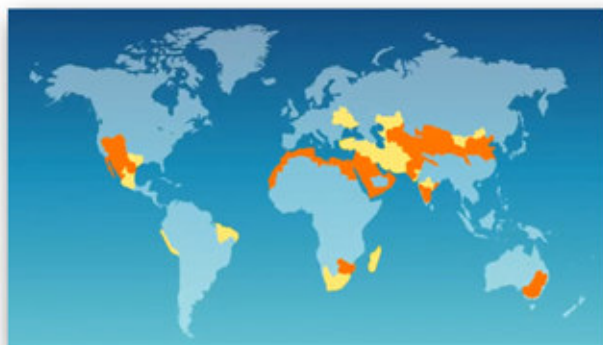
Water scarcity occurs when the demand for water from all sectors (agriculture, industries, and cities) is higher than the available resource. Because water has been relatively abundant for most of our existence, we have come to take this vital resource for granted. In the future we will find water supplies severely reduced as water scarcity is fast becoming one of the most serious resource issues facing the world.

The amount of water on this planet is fixed and very little is available for our use. 97.5% is salt water and 2.5% fresh water. Of the 2.5% of the world's water resource that is fresh water, 68.9% is locked in glaciers, 30.8% is ground water, 0.3% is in lakes and rivers.

Currently one third of the world lives in countries where there is not enough water or where the quality has been compromised. By 2025, it is expected that two thirds of the world will live in countries with a shortage of water or water with compromised quality.

There are two types of water scarcity:

- ☞ **Physical water scarcity** where there is simply not enough water available to meet our needs.



Those areas of the world currently experiencing physical water scarcity are shown in orange and those areas fast approaching physical water scarcity shown in yellow.

- ☞ **Economic Water Scarcity** exists when human, institutional and financial capital limit access even though water in nature is available for human needs.



Those areas of the world currently experiencing economic water scarcity are shown in red.



Water

Poor households in developing countries spend a greater percentage of their income securing water than families in developed countries. Water scarcity therefore impacts poor people the most and is a driver of poverty.

Water scarcity affects one in three people on every continent of the globe. Freshwater is becoming scarce for a number of reasons:

- ☞ population growth
- ☞ increased urbanization which focuses demand for water among a more concentrated population
- ☞ high levels of consumption, as the world becomes more developed, the amount of domestic water used by each person is expected to rise
- ☞ climate change will shrink the resources of freshwater.

Saving Water

There are lots of things we can do as individuals and communities to help save water, here are some suggestions. We can reduce our water consumption, re-use water and repair water leaks. Water networks systems can waste more than 40% of water supply through leaks and cracks.



☞ Reducing Water Usage

- ▲ In the shower, turn water on to get wet; turn off to lather up; then turn back on to rinse off. All players should take responsibility for turning showers off in the football changing room. Never leave them running.
- ▲ Don't let water run while shaving, brushing your teeth or washing your face.
- ▲ Football players should never drink from a running tap. Fill your water bottle or cup for a drink and avoid wasting water.
- ▲ Avoid flushing the toilet unnecessarily. Dispose of tissues, insects and other similar waste in the trash rather than the toilet.
- ▲ When washing dishes by hand, fill one sink or basin with soapy water. Quickly rinse under a slow-moving stream from the faucet.

LESSON 3

Water

- ▲ Plant it smart. Drought efficient landscaping is a great way to install and maintain both your plants and irrigation system. More importantly, it will save time, money and water.
- ▲ Plant native and/or drought-tolerant grasses, ground covers, shrubs and trees. Once established, they do not need water as frequently and usually will survive a dry period without watering.
- ▲ If you are irrigating the football field to keep the grass watered. Make sure you are irrigating early in the morning or late in the evening, not in the heat of the day when most of the water will evaporate.

☞ Reusing Water

- ▲ Never pour water down the drain when there may be another use for it such as watering a plant or garden, or for cleaning.
- ▲ Place a bucket in the shower to catch excess water and use this to water plants. The same technique can be used when washing dishes or vegetables in the sink.



- ▲ Consider ways of using rainwater as a source of water for irrigation.

☞ Repairing Water Leaks

- ▲ Verify that your home is leak free. Many homes have hidden water leaks. Read your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.
- ▲ Repair dripping faucets by replacing washers. If your faucet is dripping at a rate of one drop per second, you can expect to waste 2,700 gallons per year.

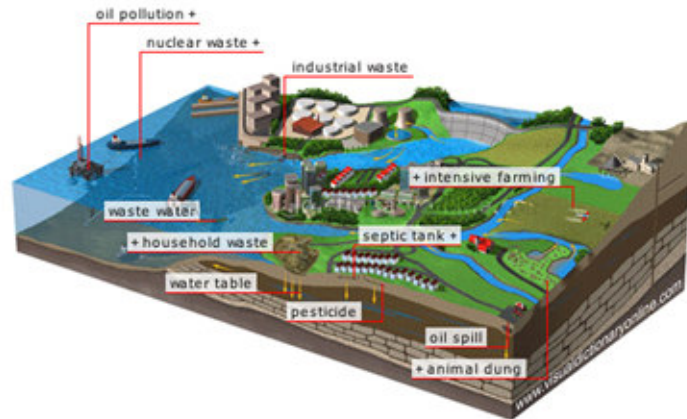


- ▲ If the toilet handle frequently sticks in the flush position letting water run constantly, replace or adjust it.
- ▲ Make sure that there are no leaks in the football changing rooms or toilets. Always report problems to the management.

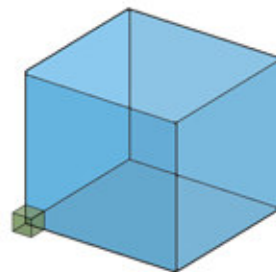
Water Pollution

Water in our reservoirs, rivers, lakes and oceans are being polluted by a number of different sources which include:

- ☞ industrial effluent
- ☞ domestic and commercial sewage
- ☞ acid mine drainage
- ☞ agricultural runoff
- ☞ litter
- ☞ oil pollution
- ☞ nuclear waste



A cubic meter of untreated waste water can pollute up to 8 cubic meters of fresh water so we need to stop polluted water entering our fresh water supplies.



Addressing Water Pollution

Water pollution is mainly the result of human activity so there are small things we can do every day that can help reduce water pollution and hence improve the protection of the environment as well as human health.

- ☞ Use washing powders and liquids sparingly and carefully as they pollute ground water.
- ☞ Never flush old medicine down the toilet. Pharmaceuticals are special waste that needs to be disposed appropriately.
- ☞ Do not throw cigarette stubs down the toilet.
- ☞ Do not put paint and solvents down the sink.
- ☞ Avoid cleaning products that contain dangerous chemicals (you'll see the warning symbols on the container). Change these to eco-friendly products.
- ☞ Place food leftovers and cooking oil in the trash or on a compost pile, never pour them down the sink.
- ☞ Encourage organic gardening and use of compost instead of harmful chemical fertilizers.

LESSON 3

Water

Water & Health

More than a billion people lack access to fresh water supplies and over 2.5 billion people to good sanitation. Water borne disease kills 3.5 Million people each year, 40% due to diarrhea, 84% who are children, and 98% who live in the developing world. Water-related disease kills a child every 15 seconds. Half of the world's hospital beds are occupied by patients suffering water borne diseases.

Water scarcity forces people to rely on unsafe sources of drinking water. It also means they cannot bathe or clean their clothes or homes properly. Poor water quality can increase the risk of such diarrheal diseases as cholera, typhoid fever and dysentery, and other water-borne infections. Water scarcity can lead to diseases such as trachoma (an eye infection that can lead to blindness), plague and typhus.

Water scarcity encourages people to store water in their homes. This can increase the risk of household water contamination and provide breeding grounds for mosquitoes.

A lack of water has driven up the use of wastewater for agricultural production in poor urban and rural communities. More than 10% of people worldwide consume foods irrigated by wastewater that can contain chemicals or disease-causing organisms.

Safe Drinking Water

In areas where tap water is not chlorinated or where sanitation is poor, there are several alternative methods for ensuring water is safe to drink. These include boiling the water, chemically disinfecting it, filtering it, using various combinations of the previously stated methods, or buying bottled water.

If the tap water is not safe to drink in an area, you should not use it to reconstitute juice or to rinse fresh fruits and vegetables. Also avoid ice made from tap water.



Bottled water from a trusted source is a recommended alternative to tap water. Before drinking, be sure all bottled beverages have fully sealed caps. If seals are not intact, the bottles may have been refilled.

Boiling water is the best method for making water safe to drink. Boiling water as recommended will kill bacterial, parasitic, and viral causes of diarrhea. Adding a pinch of salt to each quart will improve the taste. Water should be boiled vigorously for 1 minute and then allowed to cool to room temperature (do not add ice). At altitudes greater than 2,000 m, boil water for 3 minutes.

Water can also be treated chemically to kill disease causing organisms in the wide range of water-quality conditions. For more information on this you should contact a health professional.



Water

When working with our football teams / squads:

- ☞ Ask football players to keep the football field and surrounding environment clean of litter and potential sources of contamination.
- ☞ Make sure they appreciate the importance of saving water.
- ☞ Ask players and supporters to avoid wasting or polluting water.
- ☞ Organise players to reuse water where ever possible.

As YDF coaches we can raise awareness of water scarcity and pollution among the families, peers, youth and communities. We can become champions of water conservation:

- ☞ Encourage your school system and local government to promote water conservation among children and adults.
- ☞ Encourage your school system and local government to make children and adults aware of the dangers of polluted water.
- ☞ Encourage your friends and neighbors to be part of a water-conscious community.



- ☞ Encourage your friends, neighbors and co-workers to "do their part."
- ☞ Raise awareness about how to save and protect water.

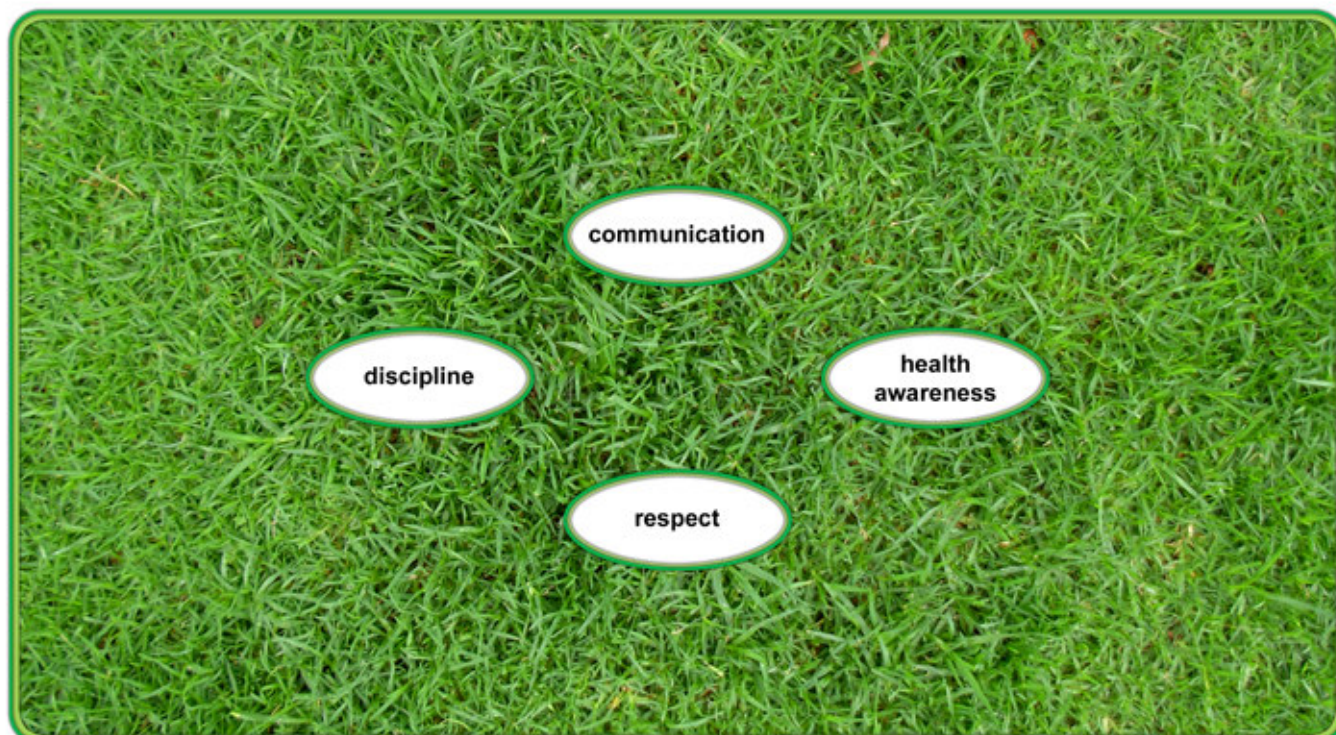
LESSON 3

Water

Football Exercises

Using Football Exercises regarding the Topic

The Life Skills listed below will be focused on in this lesson.
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Types of Equipment useful for these Exercises



Water

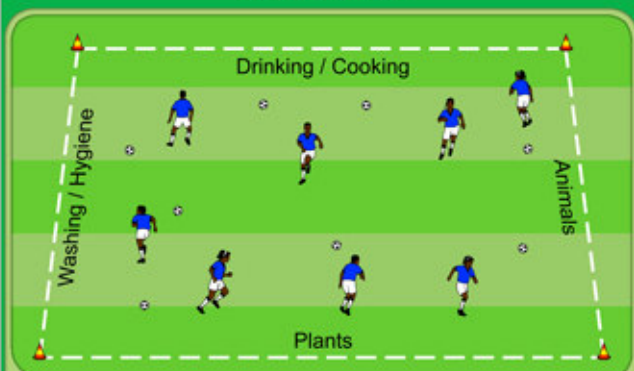
Football Exercises



Introduce the training / exercises with the following:

"One cannot imagine our everyday life without water. It is taken for granted and therefore almost invisible. We herewith want to bring to mind when and why we use and need water."

EXERCISE 1



The children learn through whom and what most of the water is used.

"Water Requirement"

- ☉ Initially the players move around in the square without a ball (yet there is a ball for each player in the square).
- ☉ Various exercises are required, e.g. skipping, hopping, sideways or backwards, circling the arms.
- ☉ The four side-lines of the square are each allocated a water usage:
 - ▲ drinking / cooking
 - ▲ washing / hygiene
 - ▲ animals
 - ▲ plants

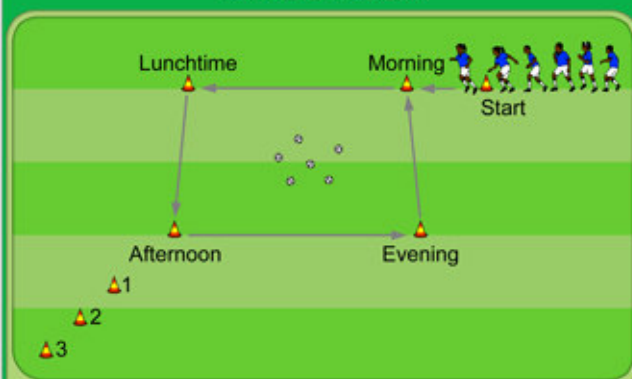
- ☉ The coach calls out a water usage, then every player has to find a ball and dribble over the said side-line.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

Water

Football Exercises

EXERCISE 2 A



"Personal Water and Drinking Requirement"

☞ The players run around the outside of the square. At every corner they have to perform a task for which they need to collect a ball:

- △ 1st cone (Morning): collect a ball from the centre of the square, dribble around the cone and return the ball to the centre. Return to the cone and carry on to the next corner.

- △ 2nd cone (Lunchtime): two players collect a ball from the centre and perform five passes within the square.

- △ 3rd cone (Afternoon): to begin with the players, without a ball, run to the first cone and back again, then to the second cone and back again, and then to the third cone and back again. When all the players have completed this part of the exercise, they have to repeat it, this time with a ball.

- △ 4th cone (Evening): the players have to juggle the ball.

☞ After this exercise has been completed, the children can be asked to run around the square for as many times as they feel they can survive without water (→ 8 rounds!).

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN



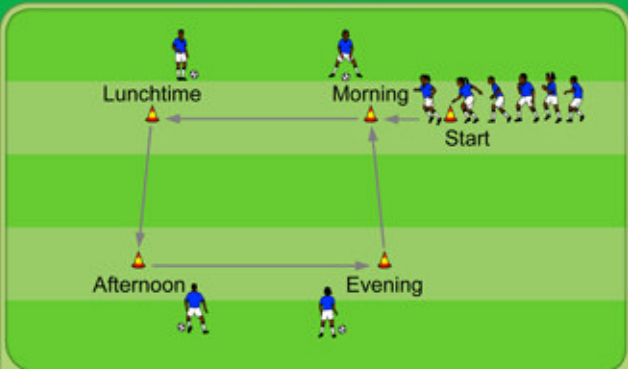
The four cones represent a time of day with which a certain activity is linked.

It is important that one drinks enough water during the day. Drinking water is symbolised by collecting a ball.

In the morning, after getting up, one should drink some water. At lunchtime water is used to cook a meal. As one does not cook for oneself only, two players have to perform this exercise together. Then during the afternoon the children do sports. Here the pressure is particularly high; therefore the children have to drink more water afterwards. During the evening the children again have to drink water with their supper.

Water Football Exercises

EXERCISE 2 B



“Personal Water and Drinking Requirement”

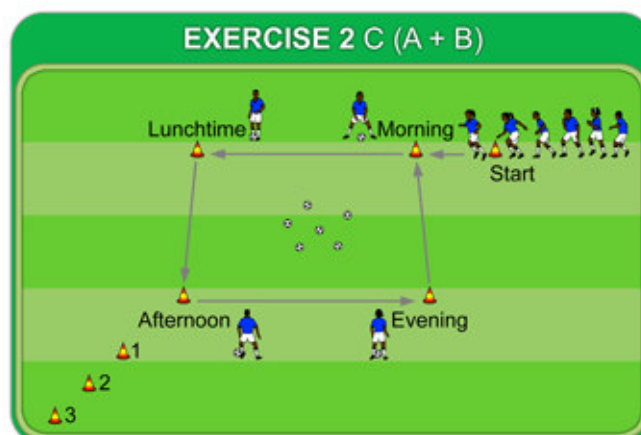
- Again the players run around the outside of the square.
- This time though the players are not required to do exercises at the corners, only when a passer stands on the outside.
- These pass / throw a ball to the players, who then have to return the ball by various methods, e.g. normal low pass, volley, trapping the ball with the upper thigh, trapping the ball with the chest, header ...



The four cones still represent the different times of the day and the balls represent the water.

This time though the water is not used for drinking / cooking, but for hygiene. After standing up in the morning one needs water to freshen up. Before lunch one should wash one's hands. During the afternoon, after sport, one should shower. And in the evening one should definitely wash one's hands before supper.

Include in training session: WARM UP **MAIN PART** CONCLUSION COOLING DOWN



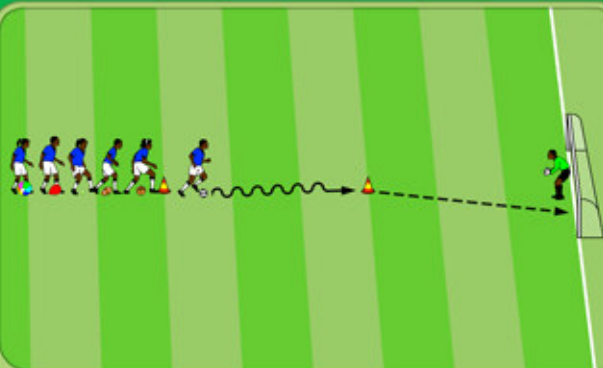
Include in training session: WARM UP **MAIN PART** CONCLUSION COOLING DOWN

LESSON 3

Water

Football Exercises

EXERCISE 3



"Water Shortage and Pollution"

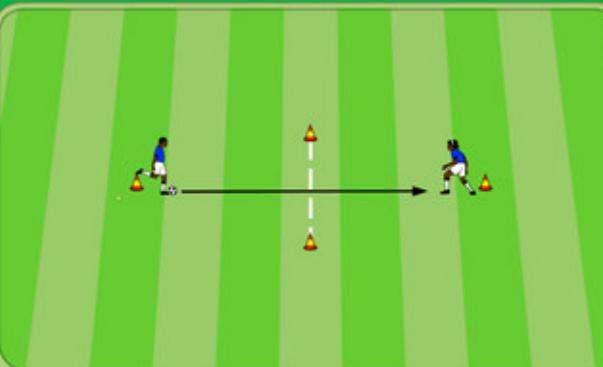
- ☞ Shoot at goal with various balls, e.g. normal footballs, tennis balls, rugby balls, balloons, ...
- ☞ There are more players than balls → the balls need to be collected after the shot at goal.



The balls symbolise the water that is used during a shot at goal. The first player can still shoot at the goal with a normal football, but after the shot the clean water is used up (water shortage). As the players now have to fall back onto polluted water, shooting a goal is now far more difficult. Fresh water (new balls) must constantly be fetched. Water is a limited resource and should not be wasted.

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

EXERCISE 4



"Wasting of Water"

- ☞ Two players stand opposite each other with a ball.
- ☞ They have to pass the ball to each other through the cone goal. If they do not manage to shoot through the cone goal, a smaller ball, e.g. tennis ball, is available as an alternative. If this one also does not go through the cone goal, this pair is eliminated.
- ☞ Several pairs can compete in this exercise.



The ball symbolises the water. The players have to treat it carefully. If the clean water is used up, they still have the possibility of using polluted water. But that water is also quickly used up if it is wasted.

One has to treat water carefully!

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN



Water
Football Exercises

Assignment for the way home and for home:

Note where water is used, where water is wasted and where water is polluted.



We shall discuss it at the beginning of the next training.



Soil

Soil forms the upper-most layer of the earth's crust and is made up of inorganic and organic matter. It is made up of three main components - minerals that come from rocks below or nearby, organic matter which is the remains of plants and animals that use the soil, and the living organisms that reside in the soil.

The proportion of each of these is important in determining the type of soil that is present. But other factors such as climate, vegetation and human activities (eg. farming, grazing, gardening etc.) are also important in influencing how soil is formed and the types of soil that occur in a particular landscape.

Soil takes thousands of years to develop from parent rock - 10 mm of soil takes between 100 and 1000 years to form. The exact amount of time taken depends upon the speed at which the parent rock weathers, i.e. is broken down into small particles. Weathering occurs through chemical, physical and biological processes.

As soil is formed it develops layers or horizons which make up the soil profile. There are generally three horizons in soil.

Topsoil

The upper layer, about 100 - 200 mm deep is where plants get their nutrients so that they are able to grow. Topsoil is often darker than the other layers as it is rich in humus. In addition to releasing nutrients for plants, humus improves the crumbly nature of the soil. When soil is crumbly it allows air to move through it, soaks up water, reduces runoff and erosion, and promotes plant growth. For topsoil to remain productive, humus must be constantly added to soil.

Sub-soil

Generally more clay-like, this layer acts as a reservoir (water store) for plants growing in the topsoil. When the sub-soil is exposed it erodes fairly easily.

Bedrock or parent rock

This is the underlying layer from which the first two horizons are formed.



Soil plays a crucial role in the economy of countries. Farming and agricultural industries are probably the most reliant upon soil, particularly in respect to crop production.

There is an important link between soils and water, the quality of our water being closely linked to the quality of the soils. Water in the soil supplies plants and animals, but acts also to transport nutrients and other important substances from the soil to plants, microbes etc.



Land Degradation

Land or soil degradation is a global problem, largely related to agricultural use. The major causes of land degradation include:

- ⊗ Land clearance, such as clear-cutting and deforestation;
- ⊗ Agricultural depletion of soil nutrients through poor farming practices;
- ⊗ Livestock including overgrazing;
- ⊗ Inappropriate irrigation and over-drafting;
- ⊗ Urban sprawl and commercial development;
- ⊗ Land pollution including industrial waste;
- ⊗ Vehicle off-roading;
- ⊗ Quarrying of stone and sand;
- ⊗ Mining for minerals, ore and coal;
- ⊗ Drilling for oil and natural gas.



The main outcome of land degradation is a substantial reduction in the productivity of the soil.

Some of the factors resulting from the causes of land degradation that damage the soil include:

- ⊗ Accelerated soil erosion by wind and water;
- ⊗ Soil acidification and the formation of acid sulfate soil resulting in barren soil;
- ⊗ Soil alkalisation owing to irrigation with water containing sodium bicarbonate leading to poor soil structure and reduced crop yields;
- ⊗ Soil salination in irrigated land requiring soil salinity control to reclaim the land;
- ⊗ Soil waterlogging in irrigated land which calls for some form of subsurface land drainage to remediate the negative effects;
- ⊗ Destruction of soil structure including loss of organic matter.

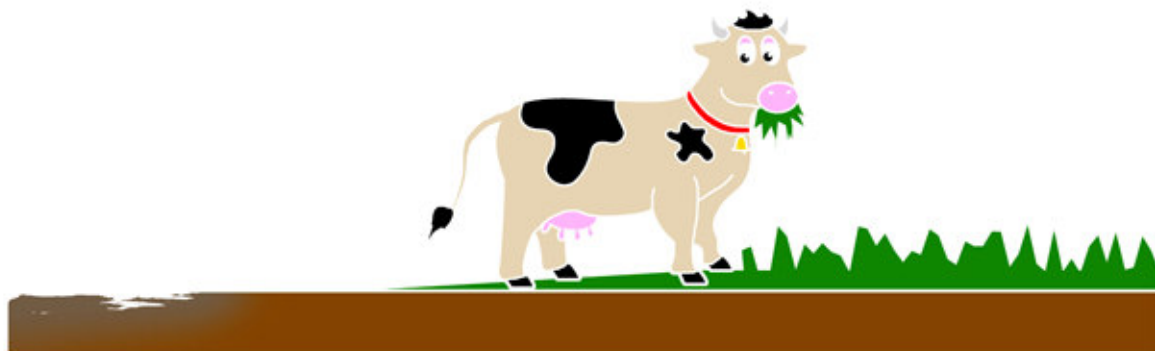
LESSON 4

Soil

Overcutting of vegetation occurs when people cut forests, woodlands and shrub lands - to obtain timber, fuel wood and other products - at a pace exceeding the rate of natural regrowth. This is frequent in semi-arid environments, where fuel wood shortages are often severe.



Overgrazing is the grazing of natural pastures at stocking intensities above the livestock carrying capacity; the resulting decrease in the vegetation cover is a leading cause of wind and water erosion.



Agricultural activities can cause land degradation such as poor rotation practice, an absence of soil conservation measures, fertilizer use, and poor irrigation practice.

Population pressure and land shortage can also cause land degradation as people use good land for housing and industry forcing farmers to adopt poor agricultural practice, such as cultivating shallow or steep soils, ploughing fallow land before it has recovered its fertility, or attempt to obtain multiple crops by irrigating unsuitable soils.

Land degradation decreases the wealth and economic development of nations by destroying arable land. As the land resource base becomes less productive, food security is compromised and competition for dwindling resources increases, the seeds of famine and potential conflict are sewn.



Soil

Soil Pollution

Soil is polluted by many ways:

- ☞ Industrial wastes, such as harmful gases and chemicals, agricultural pesticides, fertilizers and insecticides are the most important causes of soil pollution.
- ☞ Ignorance towards soil management and related systems.
- ☞ Unfavourable and harmful irrigation practices.
- ☞ Improper septic system and management and maintenance of the same.
- ☞ Leakages from sanitary sewage.
- ☞ Acid rains, when fumes released from industries get mixed with rains.
- ☞ Fuel leakages from automobiles, that get washed away due to rain and seep into the nearby soil.
- ☞ Unhealthy waste management techniques, which are characterized by release of sewage into the large dumping grounds and nearby streams or rivers.
- ☞ Waste from the mining and quarrying industries, the dumps of solid material extracted in order to separate the minerals being mined and dams of contaminated water created by the extraction processes.

I just visited a landfill site and it was full of rubbish that could have been recycled. There was glass, tin cans, plastic, paper, cardboard, wood and old bits of metal.

I hope you are not throwing recyclables in your general household waste.



Soil pollution is the contamination of soil with harmful substances that can adversely affect the quality of the soil and the health of those living on it. Common pollutants include herbicides and pesticides; litter and waste. Soil pollution is usually caused by mistreatment of the soil through poor cultivation or farming practices, industrial waste dumping and mineral utilization.

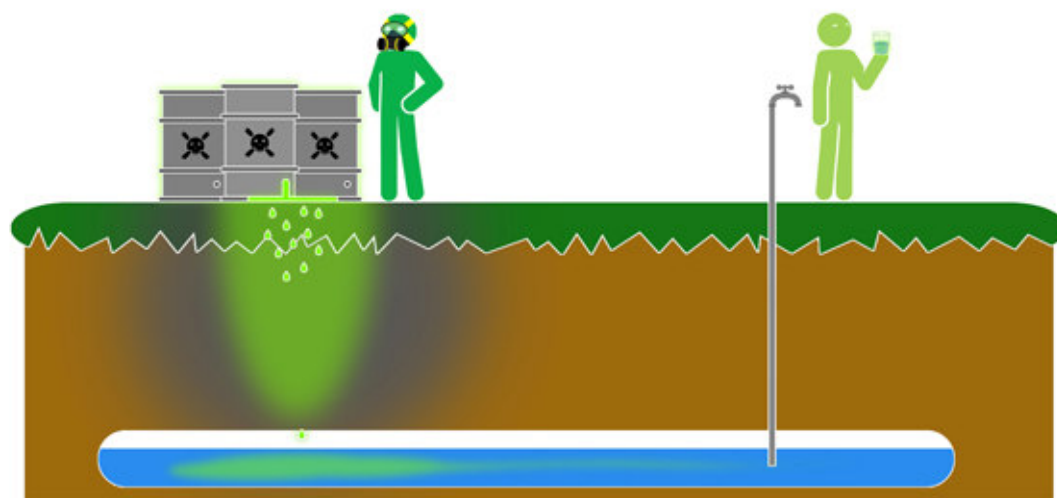
Soil pollution can be prevented or at least reduced by educating ourselves on the cause and effects of soil pollution; and the ways to stop it.

LESSON 4

Soil

Many large-scale operations, such as mining, agriculture and concentrated animal feeding operations, can introduce toxins and pollutants into the soil. These operations pollute nearby aquatic systems like streams and wetlands, destroy nearby vegetation, and degrade the soil, thereby preventing or limiting future plant growth. These activities cumulatively impact drinkable water by introducing many types of chemicals that are detrimental to human health.

Soil pollution impacts human health predominantly by contaminating drinking water supplies, such as reservoirs, groundwater and wells. Effects on human health will vary depending on the contaminant and its concentration in the water.



Soil and Climate Change

Soil is one of the largest sources of carbon in the world. It is primarily accumulated through plants which 'fix' the carbon from carbon dioxide in the air; the soil then directly absorbs the carbon as the plants decay. Additionally, dead leaves and animals are broken down by microbes in the soil and carbon is accumulated. Carbon in the soil is broken down naturally and released into the atmosphere as carbon dioxide gas. However, as the air temperature increases, this process occurs more quickly, which means too much gas is produced, adding to the atmospheric trap, and consequently to global warming.

Changes in temperature and rainfall patterns resulting from climate change can damage the physical structure of soils. The organic matter in particular is being affected, its balance being crucial to the nutrient balance of the soil, its stability, the amount of water it can hold, and the populations of soil organisms. Additionally, the changes are likely to leave some soils more vulnerable to damage by erosion.

Addressing Soil Pollution

Soil pollution is mainly the result of human activity so there are small things we can do every day that can help reduce soil pollution and hence improve the protection of the environment as well as human health.

- Reducing the use of or finding natural alternatives to toxic herbicides, pesticides and fertilizers can help prevent soil pollution. Football groundsmen should be asked to make sure that the products they are using on the football field are environmentally friendly.



Soil

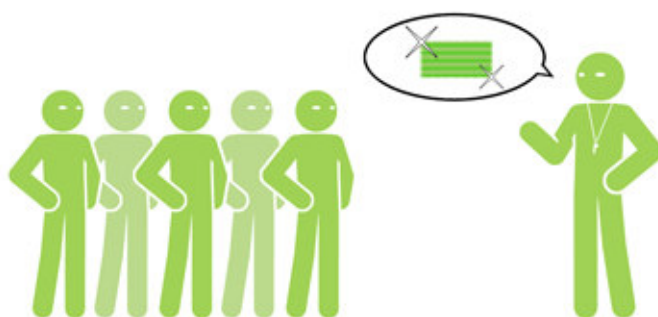
- ☞ Reuse and Recycle: Contribute less waste to help prevent soil pollution. (See lesson 6 for a list of common items that can be recycled.)



- ☞ Solid Waste should be disposed of properly to avoid soil pollution. At tournaments organise a post event clean up and separate waste into recyclables and non-recyclables.

When working with our football teams / squads:

- ☞ Make them aware that they are responsible for this particular piece of earth (the pitch).
- ☞ Ask players and supporters to keep the area clean.



- ☞ Provide proper latrines for players and supporters.

As YDF coaches we can raise awareness of soil degradation and pollution among the families, peers, youth and communities. We can become environmental champions advocating for soil conservation.

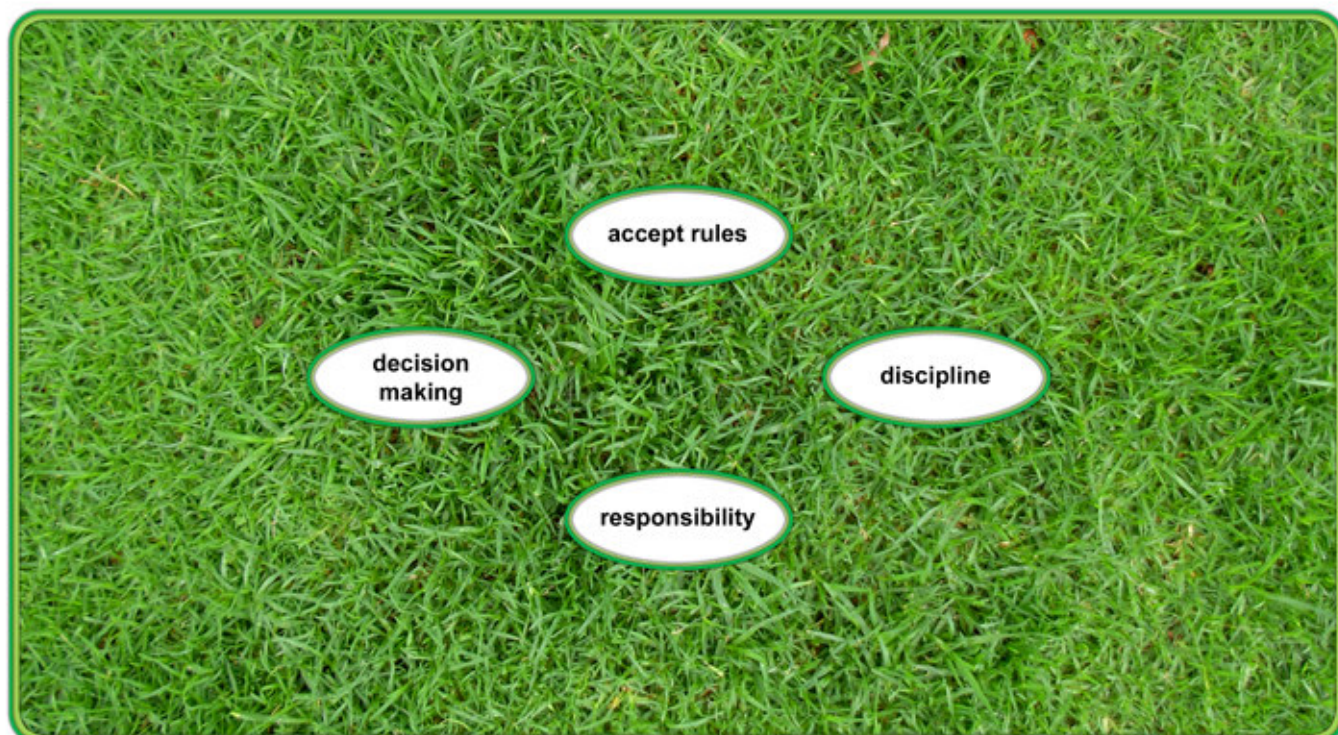
- ☞ Encourage your school system and local government to help develop and promote a soil conservation ethic among children and adults.
- ☞ Raise awareness about how to prevent unnecessary pollution of the land.

LESSON 4

Soil Football Exercises

Using Football Exercises regarding the Topic

The Life Skills listed below will be focused on in this lesson.
They are incorporated in the Football Exercises on the following pages.



Types of Equipment useful for these Exercises



Soil

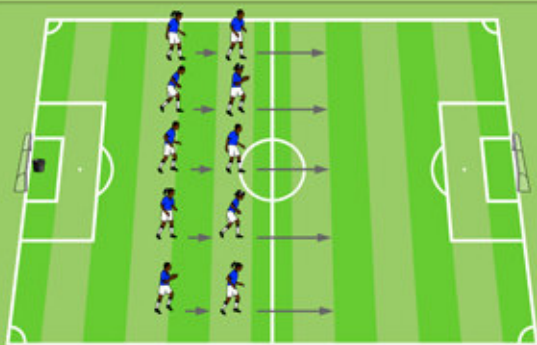
Football Exercises



Introduce the training / exercises with the following:

"Soil is everywhere - it looks so strong, constant and indestructible, and yet..."

EXERCISE 1



"Cleaning the Playing Field"

- ☞ All the players run over the playing field to collect refuse.
- ☞ While they are doing that, the coach can instruct them to do various running exercises or exercises with a ball.



Motivating Story

We can make a difference in keeping our world clean. Therefore everyone's help is important.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

LESSON 4

Soil

Football Exercises

EXERCISE 2



"Separate your Waste"

- ❖ Various items are spread in a square (bibs, balls, cones).
- ❖ The task is to collect these items as quickly as possible and bring them to the side-line, sorted!
- ❖ The bibs have to be carried by two players, the balls have to be dribbled and the cones have to be balanced on the head.
- ❖ Two teams have to fulfil this task one after the other. Try with and without ball. Which team is quicker?

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN



There is a lot of refuse lying around. If one is a big group, this refuse can be cleared quickly.

It is also important that one does not simply burn the refuse. It has to be sorted and then disposed of lawfully and environmentally friendly.

EXERCISE 3



"Recycling"

- ❖ One player out of the two teams dribbles from the middle through the cones and shoots at the goal.
- ❖ The player returns to his/her team.
- ❖ The next player starts dribbling towards the goal.
- ❖ Afterwards, the first player of each team starts dribbling the balls back into the middle and runs back to the team. The other team players continue.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN



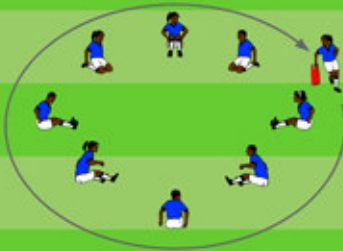
One team represents glass the other represents paper.

Every team has to collect the paper or glass from the middle and then sell the waste.



Soil
Football Exercises

EXERCISE 4



"The Plump Sack goes around"

- ☞ All the players sit in a circle, looking towards the centre.
- ☞ One player is chosen to walk behind the other players, holding a bib in his/her hand. He/she then drops (plumps) the bib (sack) behind a player. Now that player has to get up and try to catch the first player.
- ☞ The first player has to run around the circle and quickly sit down in the available space. If he/she



There are always people who just drop their refuse. It is important for the community that these people are caught and made aware of the fact that one should not do that.

- manages this, the other player has to take the bib and start a new round.
- ☞ The coach can instruct them to do various exercises, e.g. the players could hop, skip, crawl...

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

EXERCISE 5



"Circle Game"

- ☞ The players try to put all the balls into the circle as quickly as possible.
- ☞ Two players try to stop them.
- ☞ The players should wear different colour bibs in order to distinguish between the two groups.



The balls symbolise refuse that the children are trying to dispose of lawfully and environmentally friendly. Unfortunately, there are people who want to stop them.

These people need to be defeated.

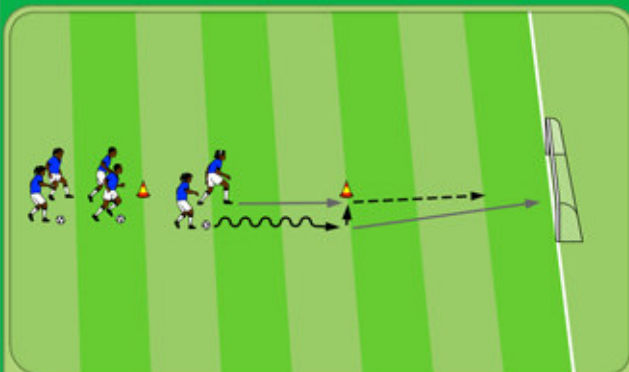
Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

LESSON 4

Soil

Football Exercises

EXERCISE 6 A



"Goal Shooting Exercise"

- ☞ The players play in pairs.
- ☞ One player dribbles towards the goal with the ball, but leaves it at the cone. He/she runs on to the goal without the ball.
- ☞ The other player comes up shortly after him/her and shoots the ball at the goal.

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

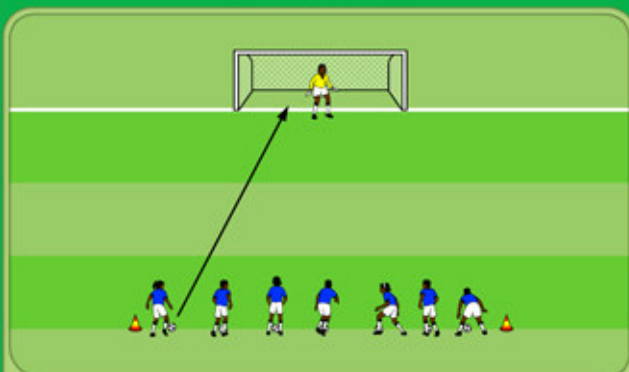


The first player is an environmental polluter.

The second player cleans up the refuse after him.

He then flings the refuse at him so that the first player realises that next time he should take his refuse along and dispose of it properly.

EXERCISE 6 B



"Goal Shooting Exercise"

- ☞ The players shoot at the goal, one after the other.
- ☞ If a player does not manage to score a goal, the whole team has to run around the goal once.

Include in training session: WARM UP MAIN PART CONCLUSION COOLING DOWN

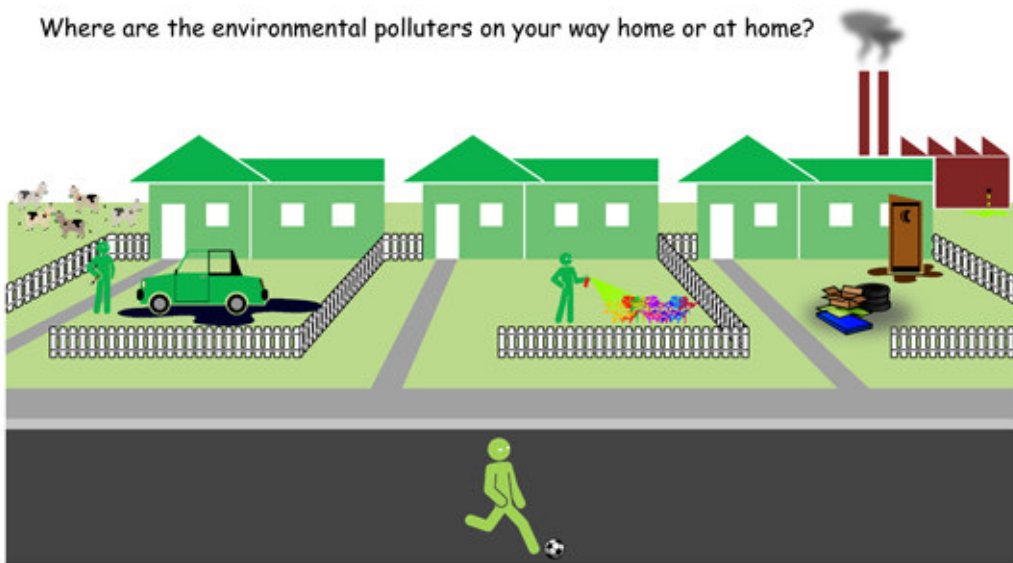


The children have to dispose of the refuse, but if it does not land in the "bin", they will be punished.

Soil
Football Exercises

Assignment for the way home and for home:

Where are the environmental polluters on your way home or at home?



We shall discuss it at the beginning of the next training.

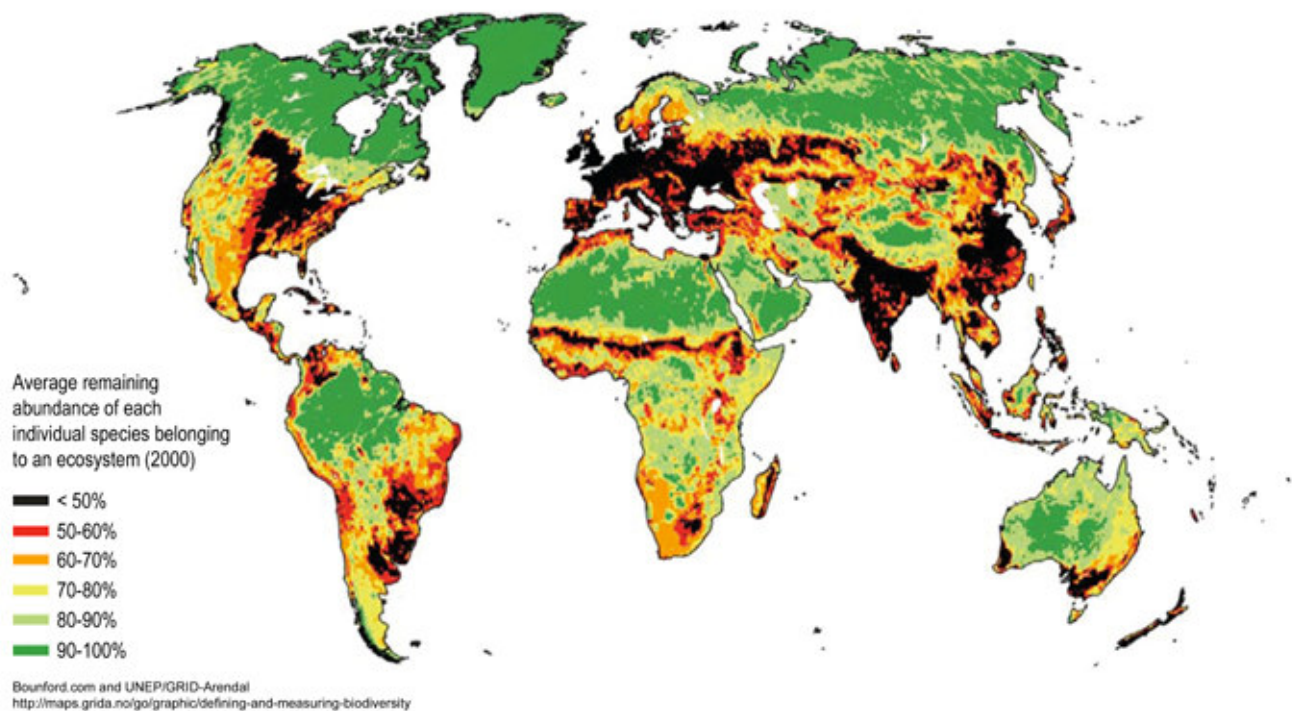


Biodiversity

The variety of life on Earth, its biological diversity is commonly referred to as biodiversity. The number of species of plants, animals, and microorganisms, the enormous diversity of genes in these species, the different ecosystems on the planet, such as deserts, rainforests and coral reefs are all part of a biologically diverse Earth.

Biodiversity contributes to our health, food and energy security, provision of raw materials and provides us with choice.

Roughly 1.4 million species are known to science, but estimated 10-30 million species are likely to exist. 18,788 species out of 52,017 so far assessed are threatened with extinction. This escalating extinction crisis shows that the diversity of nature cannot support the current pressure that humanity is placing on the planet.



Biodiversity under Threat

Human activity is threatening biodiversity - over-hunting, habitat destruction, invasion of non-native species, domino effects, pollution, and climate change. Habitat loss presents the single greatest threat to world biodiversity.

Industrial-farming techniques deprive diverse species of food sources and instead feed them with chemicals, destroying the rich biodiversity in the soil and with it the basis for the renewal of the soil fertility.

Conservation and sustainable development strategies take into account the importance of nature and its biological diversity to life on our planet. At least 40% of the world's economy and 80% of the needs of the poor are derived from biological resources. The richer the diversity of life, the greater the opportunity for medical discoveries, economic development, and adaptive responses to new challenges such as climate change. Declining biodiversity is therefore a concern for many reasons.



Biodiversity

Ecosystems

Biodiversity makes our ecosystems productive - Different species, no matter how small, all have an important role to play. A larger number of plant species means we have access to a greater variety of crops. A diversity of species ensures natural sustainability for all life forms and healthy ecosystems can better withstand and recover from a variety of disasters.

Healthy biodiversity provides a number of natural services for everyone, such as:

- ☞ Protection of water resources;
- ☞ Soil formation and protection;
- ☞ Nutrient storage and recycling;
- ☞ Pollution breakdown and absorption;
- ☞ Contribution to climate stability;
- ☞ Maintenance of ecosystems;
- ☞ Recovery from unpredictable events.

Biological resources provide humans with a variety of things we need, including:

- ☞ Food;
- ☞ Medicinal resources and pharmaceutical drugs;
- ☞ Wood products;
- ☞ Ornamental plants;
- ☞ Breeding stocks, population reservoirs;
- ☞ Diversity in genes, species and ecosystems.



Biodiversity also brings us a number of social benefits, such as:

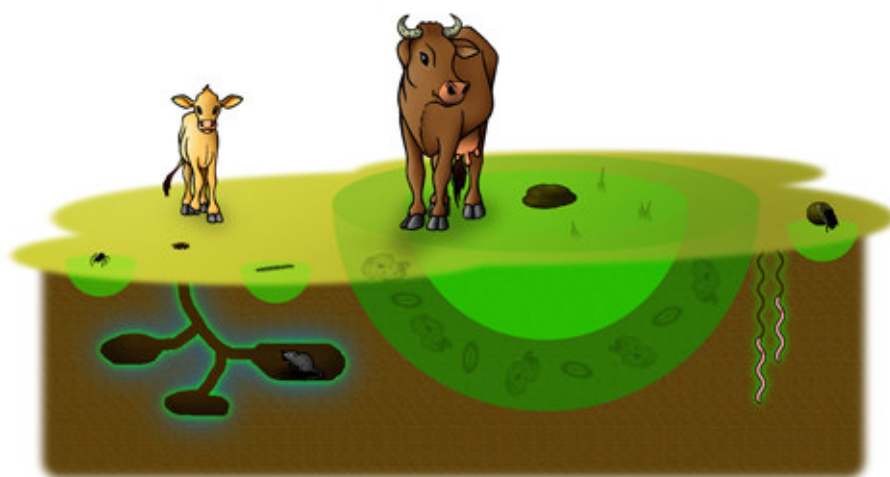
- ☞ Education;
- ☞ Recreation and tourism;
- ☞ Cultural values.

LESSON 5

Biodiversity

In different habitats, the ecosystems see all life forms closely integrated and supporting each other. Consider for example the biodiversity at work when you look a field full of grazing cattle:

- ☞ The cattle feeding on the grass in the field;
- ☞ Cattle waste is feeding the soil that nourishes the grass;
- ☞ Bacteria feed on the cellulose fibres of grass and return them to the soil;
- ☞ Amoebas feed on bacteria making lignite fibers available for uptake by plants;
- ☞ Algae provide organic matter and serve as natural nitrogen fixers;
- ☞ Rodents that bore under the fields aerate the soil and improve its water-holding capacity;
- ☞ Spiders, centipedes and insects grind organic matter from the surface soil and leave behind enriched droppings;
- ☞ Earthworms contribute to soil fertility, aerating the soil, drainage and maintaining soil structure.



This example shows that all life forms in an ecosystem are important.

Threats to Biodiversity

Fruits and vegetables, which represent a third of our food, would not exist without pollinators visiting flowers. The primary species that fertilizes food-producing plants is the honeybee. Honey bees have suffered dramatic declines in recent years.

Honeybees are vital to biodiversity. There are some 130,000 plants that rely on honeybees pollinating them. Researchers think the decline in the honeybee is related to disease, environmental pollution, environmental degradation and farming practice such as the use of pesticides and the growing of large fields of the same crop. The results of human activity would appear to be killing off the honeybee.

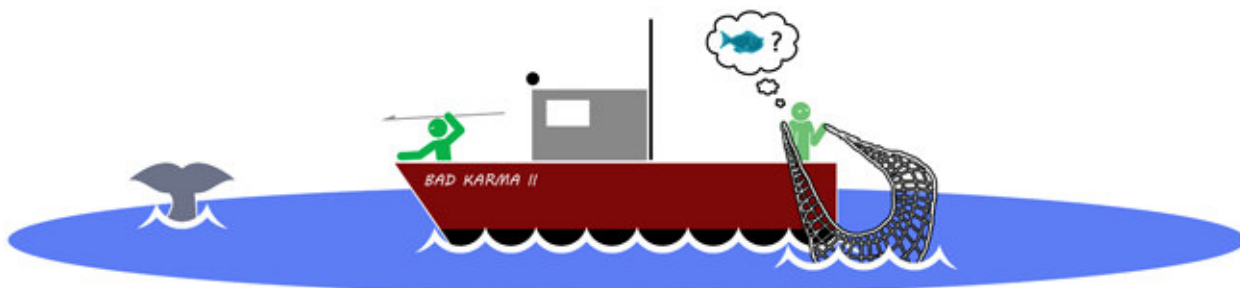
The dependency of plants on pollinators (honeybees) and of pollinators on plants is crucial. If we want to safeguard the supply of our food supply we need honeybees to pollinate.



Biodiversity

Another example of how human actions can negatively impact on the inter-dependency of species comes from our oceans.

Fishermen encouraged whaling as they thought whales ate large quantities of the fish they wanted to harvest. A reduction in local whale populations meant that killer whales that would normally prey on younger whales moved on to hunt seals instead. As the seal numbers declined the whales moved on to hunt sea otters. This decimated otter populations but caused urchins and other targets of the otters to flourish. These in turn decimated the kelp forests that had previously enabled fish larvae to flourish. The fish larvae now exposed became easy prey for a variety of sea life and so fish stocks rapidly declined.



In advocating reduction of the whale population, the fishermen disrupted the biodiversity of the ocean's ecosystem creating a domino effect that caused a decline in fishing stocks and impacted on the livelihoods of the same fishermen.

Invasive Alien Species

Invasive alien species (plants, animals and micro-organisms) are species that occur outside of their natural habitat or country of origin and due to their ability to outperform and outgrow indigenous species; they establish themselves in these non-native habitats.

Invasive alien species have also been called weeds, pests, encroachers, aliens, invasives, exotics or non-indigenous. They are native to a particular area or region, but have been introduced elsewhere, either by accident or on purpose. Invasive alien species can be animals (e.g. rats), plants (e.g. lantana) and micro-organisms (e.g. cholera).

The introduction of alien species often upsets local biodiversity leading to the decline or extinction of the natural habitat.

They may push out indigenous species or may cause damage in other ways. Willow Trees for example planted to help dry up water logged areas can destroy wetlands habitats impacting on the animals and plants that have adapted to wetland environments.

The African Great Lakes, Victoria, Malawi and Tanganyika, are famous for their great diversity of endemic species, termed "species flocks", of cichlid fishes. In Lake Victoria, a single, exotic species, the **Nile Perch** was introduced for subsistence and sports fishing. This fish has become established and has caused the extinction of most of the native species, by simply eating them all!



Biodiversity

Climate Change

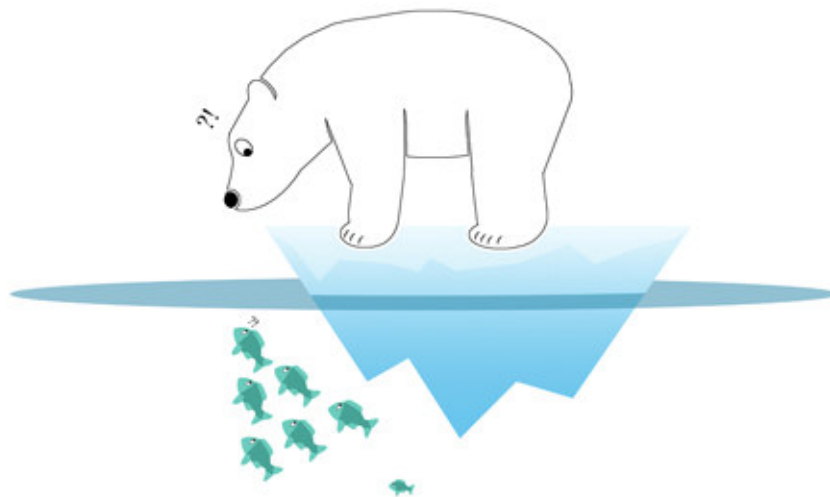
Throughout the Earth's history the climate has been subject to change. Some species have been able to adapt whilst others, like their habitats, have disappeared. The challenge with the current climate change that our planet is experiencing is the rate of change. Our climate is changing so quickly that it is threatening the extinction of many species as there simply isn't time for them to adapt.

Rapid climate change and its impact on nature's biodiversity poses a major threat to mankind. Climate change is impacting on food supply, availability of water, sources of medicine and other natural resources that we take for granted. As plants and fauna disappear, these become unavailable to humans as a resource.

Climate change is altering migratory species patterns, causing species to move to higher latitudes and increasing coral bleaching.

Consider this scenario of how climate change could be impacting on biodiversity:

- ☞ The ice caps are melting due to global warming.
- ☞ The ice caps used to help reflect sunlight and heat back out to space.
- ☞ The oceans and the air now absorbs more heat which in turn accelerates the melting of the ice caps.
- ☞ Species on top and under the ice caps start to disappear as their habitat is changed.

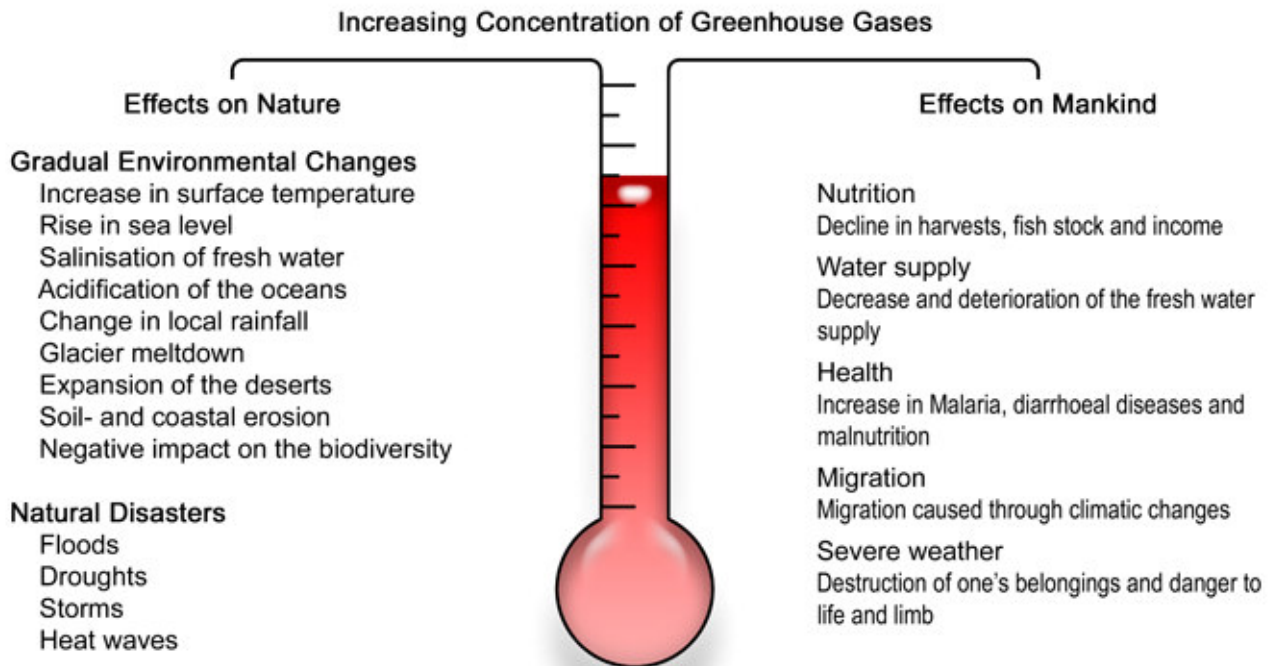


- ☞ Increased seawater temperature and salinity, leads to changes in algae (primary) productivity and impact on plankton and fish.
- ☞ Declining stocks of fish impact on birds, fish and marine mammals further up the food chain.

Climate change is leading to changes to local ecosystems and in turn to species loss. Decreasing biodiversity represents a serious problem for humankind which is reliant on biodiversity to meet many of their needs.



Biodiversity



When working with our football teams / squads:

- ☞ Make them aware that they appreciate the importance of bio-diversity to our life on this planet.
- ☞ Ask players and supporters to avoid damaging natural habitats.
- ☞ Organise players to help environmental groups remove alien plants from the environment.

As YDF coaches we can raise awareness of bio-diversity among the families, peers, youth and communities. We can become champions of bio-diversity:

- ☞ Encourage your school system and local government to help develop and promote bio-diversity and conservation among children and adults.
- ☞ Raise awareness about how to promote biodiversity.

LESSON 5

Biodiversity Football Exercises

Using Football Exercises regarding the Topic

The Life Skills listed below will be focused on in this lesson.
They are incorporated in the Football Exercises on the following pages.



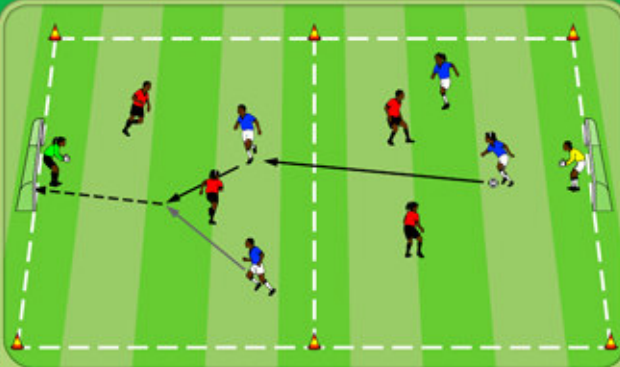
Types of Equipment useful for these Exercises



Biodiversity

Football Exercises

EXERCISE 1



"4-on-4 Game"

- ⦿ The coach asks the teams to choose: who will be the goalkeeper, who will be the player who may shoot goals, and who will be the field players who may not shoot goals.



There are many different species in nature that all have their different functions and characteristics.

Include in training session: WARM UP MAIN PART **CONCLUSION** COOLING DOWN

EXERCISE 2



"Diversity Game"

- ⦿ The players on the outside of the field try to get to the other side of the field without being touched.
- ⦿ In the first round, the field players may only stretch their arms.
- ⦿ In the second round two of the six players may move in a crab's walk.
- ⦿ In the third round two further players may move on all fours, and in the fourth round one player may walk normally.



Initially there is no biodiversity, there are only trees. Then there are crabs, then animals, and eventually also one man. The children learn that all these species are diverse and influence them differently.

- ⦿ Suggestion: with a big team players can start from both sides.

Include in training session: **WARM UP** MAIN PART CONCLUSION COOLING DOWN

LESSON 5

Biodiversity

Football Exercises

EXERCISE 3



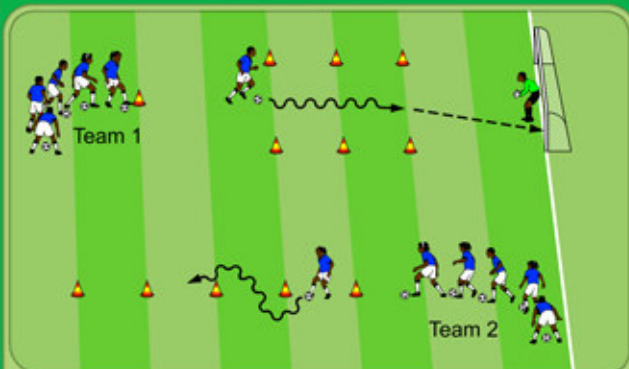
"Save your Energy"

- ☞ The children move around in the field with balls.
- ☞ The coach gives them various dribbling exercises.
- ☞ After a while the coach gives a command that means the players have to go to one of the small squares, where they either have to lie down or may drink something.

The energy of the children is depleted after a while and has to be recharged. To protect the environment, the regenerative energies of the sun and water are utilised.

Include in training session: **WARM UP** **MAIN PART** CONCLUSION COOLING DOWN

EXERCISE 4



"Slalom Game"

- ☞ Two teams compete against each other.
- ☞ Team 1 may shoot at the goal. In the beginning they may shoot from the first cones.
- ☞ Once all the players from Team 2 have run through the slalom course, Team 1 may only shoot from the second cones.
- ☞ When all the players of Team 2 have run through the slalom course twice, Team 1 may only shoot from the third cones.

As the Earth warms up, it has a negative effect on mankind.

- ☞ After the third time the round is over. Now the teams exchange tasks.
- ☞ Which team has shot more goals?

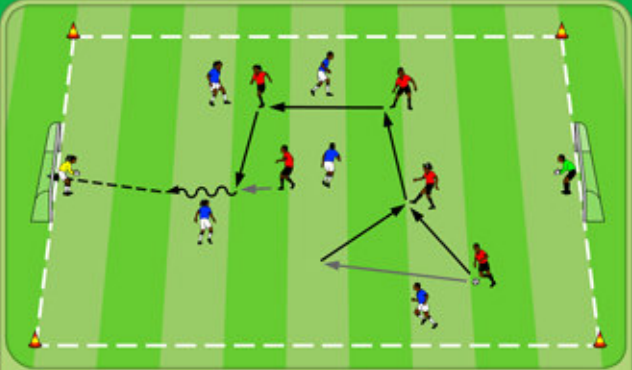
Include in training session: **WARM UP** **MAIN PART** CONCLUSION COOLING DOWN



Biodiversity

Football Exercises

EXERCISE 5



"Stronger together"

- ⦿ The coach divides the players into two teams.
- ⦿ The players must pass the ball five times in order to be allowed to shoot at the goal.
- ⦿ Once a goal is scored, the other team loses one team member.



The environment consists of a variety of ecosystems and organisms, all these elements must play together in order to function well.

Include in training session: WARM UP MAIN PART **CONCLUSION** COOLING DOWN

Practical Environmental and Climate Change Actions

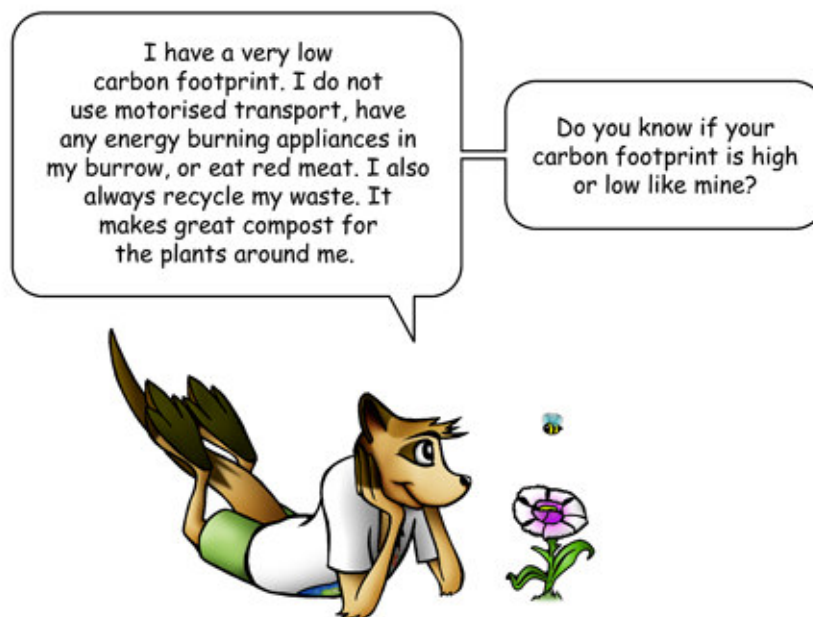
The natural environment is being stressed by human activity and we all have the challenge of addressing threats to the environment, individually, collectively, in our communities, nationally and internationally.

These challenges include:

- ☞ How to reduce our reliance on natural resources that are not renewable.
- ☞ How to stop deforestation and to plant more trees to replace those we have destroyed.
- ☞ How to preserve our land by reducing pollution and using better farming practices.
- ☞ How to stop over fishing the oceans.
- ☞ How to slow down global warming and address the impact of climate change.

Carbon Footprint

A person's carbon footprint is an estimate of how much carbon dioxide is produced to support their lifestyle. It measures a person's impact on the climate based on how much carbon dioxide they produce. Factors that contribute each person's carbon footprint include their travel methods, general home energy usage, what they eat, whether they recycle and how they manage their waste. A person's carbon footprint is measured in terms of the tonnes of carbon dioxide they produce.



You can find calculators online that help you calculate the amount of carbon dioxide your lifestyle is producing. If everyone in the world knew their carbon footprint and how their individual lifestyle was contributing to the amount of carbon dioxide they produce, they could take steps to reduce their carbon footprint or to offset it.

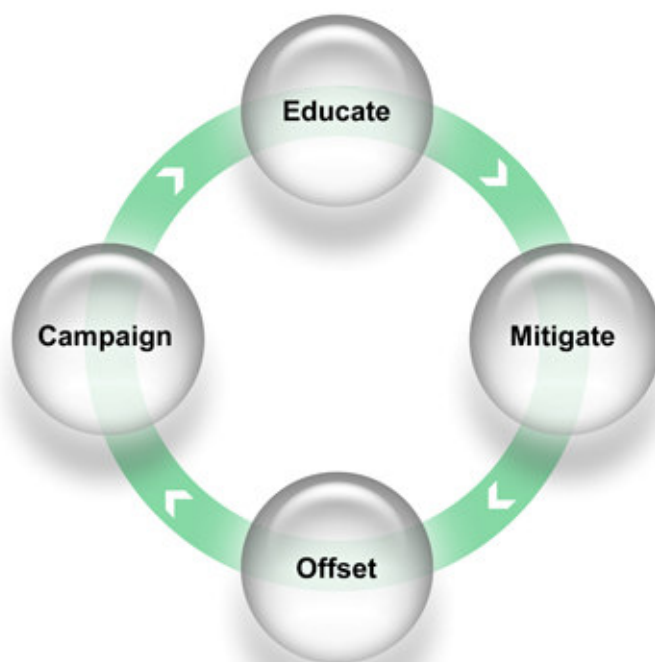
Carbon footprints can also be applied on a larger scale, to companies, businesses, even countries.



Practical Environmental and Climate Change Actions

Taking Action

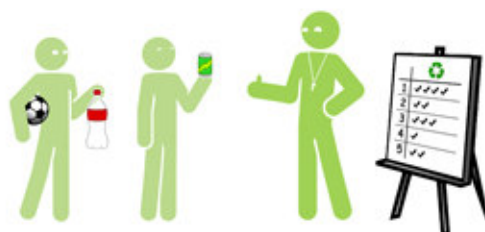
Individuals can take action to address the challenges to the environment including addressing climate change through the following strategies:



Education

YDF Coaches can help address challenges to the environment by using football to educate youth on the importance of protecting our environments and on conserving resources. We can do this through football based activities of which there are many examples in this manual. We can use other means of raising awareness of the youth we work with. Examples would include:

- ☞ Organising an Earth Day tournament with teams scoring points for football and for a quiz on the environment;
- ☞ Obtaining leaflets on environmental matters from environmental groups and distributing these to the youth (or if they have access to the internet send them to websites on environmental education and save some paper);
- ☞ Organising a community clean up (contact the local authority or environmental groups to get safe gloves for the youth to wear when collecting litter);
- ☞ Introduce a "points scheme, youth bring paper, plastics, soft drink tins, that can be recycled to training sessions and get points which are linked to a reward system.



Practical Environmental and Climate Change Actions

Mitigation

The term mitigation is used to describe measures that can be taken to decrease or reduce the impact of actions of that are harming the environment. Adopting renewable less-polluting ways of producing energy such as solar or tidal power will reduce the need to use non-renewable polluting means that burn fossil fuels. Through using alternative forms of energy we can reduce the amount of air pollution and decrease or reduce global warming.

There many things that you can do as an individual, and can encourage others to do to mitigate. Here are a few examples:

- ☞ Turn off electrical equipment when not in use (lights, television, DVD player, Hi Fi, computer, etc);
- ☞ Fill your dish washer and washing machine with a full load - this will save you water, electricity, and washing powder (wash the football club's team kit together);
- ☞ Fill the kettle with only as much water as you need;
- ☞ Do your weekly shopping in a single trip;
- ☞ Hang out the washing to dry rather than tumble drying it;
- ☞ Fit energy saving light bulbs;
- ☞ Insulate your hot water tank;
- ☞ Recycle your grey water;
- ☞ Replace your old fridge / freezer (if it is over 15 years old), with a new one with energy efficiency rating of "A";
- ☞ Car share to work, or for the kids school run, or taking the youth to football training or matches;
- ☞ Use the bus or a train rather than your car (consider public transport for team trips);
- ☞ For short journeys either walk or cycle;
- ☞ Try to reduce the number of flights you take (choose opposition closer to home, create more local leagues);
- ☞ See if your employer will allow you to work from home one day a week;
- ☞ When staying in a hotel - turn the lights and air-conditioning off when you leave your hotel room, and ask for your room towels to be washed every other day, rather than every day;
- ☞ Don't buy bottled water if your tap water is safe to drink (take a plastic bottle to training with you and carefully fill it from the tap);
- ☞ Buy local fruit and vegetables, or even try growing your own (start a community garden beside the football pitch);
- ☞ Don't buy fresh fruit and vegetables which are out of season, they may have been flown in;



Practical Environmental and Climate Change Actions

- ☞ Try to only buy products made close to home (look out and avoid items that are made in the distant lands);
- ☞ Don't buy over packaged products;
- ☞ Recycle as much as possible (organise recycling and reusing at the football club);
- ☞ Read the labels of products you buy so that you buy more environmentally friendly products. Look for the recycle logo as well as the ozone friendly logo.



There are many other things that you can do as an individual and can encourage your friends, family and the people you work with to do.

☞ *Re-Purposing*

YDF Coaches can mitigate by creating their own training equipment from waste products and repurposing them for use on the sports field.

- ▲ Create a set of mini-goals from recycled wood or plastic conduit. Use the wood or plastic for the frame and some old netting to complete the goals.
- ▲ Ask the players to bring their own plastic bottle to training. This can be a used soft drinks or energy drink bottle. The players can carefully fill their own bottles with water and have the use of their own water bottle.
- ▲ Use old soft drink bottles as cones for activities. Fill the bottom with some sand to provide stability.

Offsetting

The term offsetting is used to describe measures that can be taken to compensate for or counterbalance impact of actions of that are harming the environment. A person calculating that their lifestyle produces a carbon footprint of 20 tonnes of Carbon Dioxide, which is 18 tonnes more than the global target per person to combat climate change, may decide to offset this by paying for trees to be planted. Trees absorb Carbon Dioxide and produce Oxygen.

You can contribute to offsetting as an individual, and can encourage others to offset as well. Here are a few examples:

- ☞ You can plant some trees in your garden or community. Maybe some trees that will also act as a windbreak around your football pitch. Contact environmental groups to enquire how you can obtain some free trees to plant.



Practical Environmental and Climate Change Actions

- ☞ You can install a solar heating panel to heat your water. Maybe the local football club can have floodlights driven by batteries that are powered by solar panels.
- ☞ You can start your own vegetable garden. Growing your own vegetables cuts down on the need to transport vegetables to shops and it also saves you money.

Mitigation and Offsetting are the two main strategies being used to address global warming and climate change.

Campaign

We would like to see YDF coaches become advocates for change and taking part in campaigns to increase awareness of our environment and what needs to be done if we are going to reverse the harmful effects of pollution and climate change. YDF coaches can help in the campaign for the environment by:

- ☞ Joining or partnering with local environmental organisations.
- ☞ Supporting environmental campaigns through football based activity.
- ☞ Sharing your knowledge on the environment with youth, friends, family and your community.
- ☞ Attending community meetings and getting the environment on the agenda.
- ☞ Practicing what you preach, recycle, reuse, reduce.



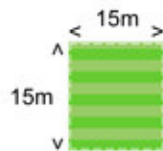
Practical Environmental and Climate Change Actions

Football Session 1

WARM UP



20 MINUTES



4 Cones

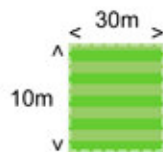


Bibs

MAIN PART



50 MINUTES



2-3 Ball for every pitch



4 Cones



Various types of Balls
(Football, Tennis, Basketball, ...)

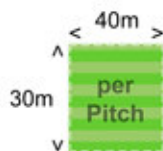


1 Goal

CONCLUSION



20 MINUTES



2-3 Balls for every pitch



6 Cones for every pitch



Bibs for half the players



2 Goals for every pitch

Practical Environmental and Climate Change Actions

Football Session 1

WARM UP

20 MINUTES

PHASE 1



“Catch Games”

- ☞ All the players are in a square with one catcher.
- ☞ This catcher has to tag the other players.
- ☞ The tagged players are now also catchers.
- ☞ The tagged players hold hands, thereby forming a chain, and carry on trying to tag other players.



The catcher is an air polluter. He gets more and more players on his side so that in the end no one has the chance to get away from the polluted air.

Variations

- ☞ Tagged players are not eliminated, but have to make a bridge, and are back in the game when another player crawls through the bridge.

PHASE 2

Variation of “Catch Games”

- ☞ There are two catchers, wearing different coloured bibs.
- ☞ These two catchers try to tag as many players as possible.
- ☞ Tagged players are eliminated and can do another exercise outside the square until all the players are eliminated.
- ☞ Players may not be tagged if they are standing at a cone.

Variations

- ☞ Tagged players are not eliminated, but have to make a bridge, and are back in the game when another player crawls through the bridge.



The two catchers are different sources of pollution.

One, for example, is a car driver with a broken exhaust, the other one burns refuse.

More and more people are caught in the polluted air, except for those people standing at a tree, because trees are very important ...



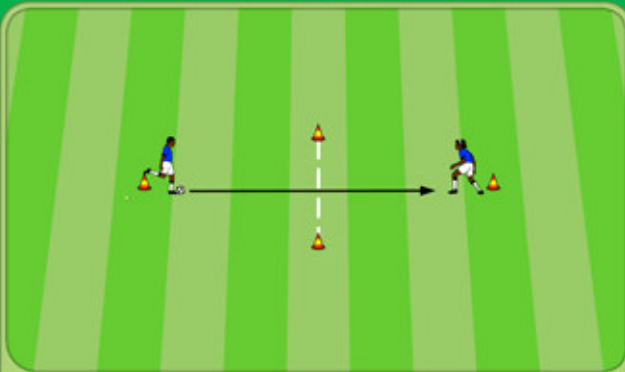
Practical Environmental and Climate Change Actions

Football Session 1

MAIN PART

50 MINUTES

PHASE 1



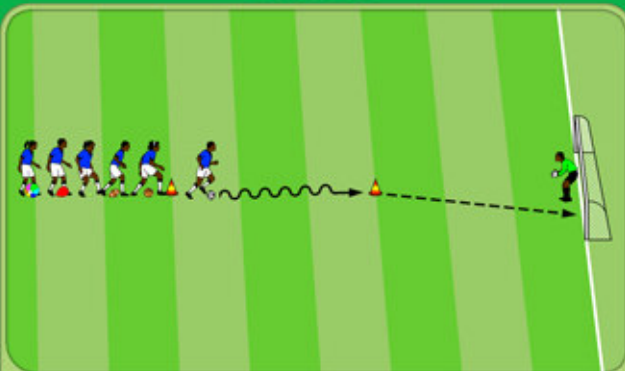
"Wasting of Water"

- ⦿ Two players stand opposite each other with a ball.
- ⦿ They have to pass the ball to each other through the cone goal. If they do not manage to shoot through the cone goal, a smaller ball, e.g. tennis ball, is available as an alternative. If this one also does not go through the cone goal, this pair is eliminated.
- ⦿ Several pairs can compete in this exercise.

The ball symbolises the water. The players have to treat it carefully. If the clean water is used up, they still have the possibility of using polluted water. But that water is also quickly used up if it is wasted.

One has to treat water carefully!

PHASE 2



"Water Shortage and Pollution"

- ⦿ Shoot at goal with various balls, e.g. normal footballs, tennis balls, rugby balls, balloons, ...
- ⦿ There are more players than balls → the balls need to be collected after the shot at goal.

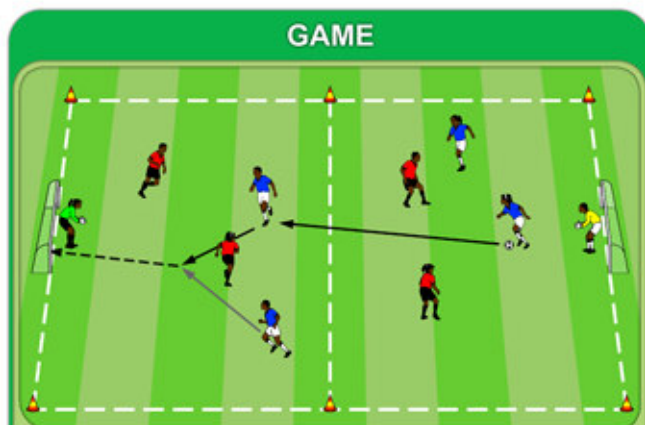
The balls symbolise the water that is used during a shot at goal. The first player can still shoot at the goal with a normal football, but after the shot the clean water is used up (water shortage). As the players now have to fall back onto polluted water, shooting a goal is now far more difficult. Fresh water (new balls) must constantly be fetched. Water is a limited resource and should not be wasted.

Practical Environmental and Climate Change Actions

Football Session 1

CONCLUSION

20 MINUTES



"4-on-4 Game"

- The coach asks the teams to choose: who will be the goalkeeper, who will be the player who may shoot goals, and who will be the field players who may not shoot goals.



There are many different species in nature that all have their different functions and characteristics.

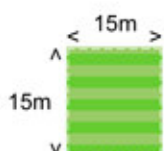
Practical Environmental and Climate Change Actions

Football Session 2

WARM UP



20 MINUTES



10 Balls



10 Cones

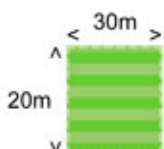


10 Bibs

MAIN PART



50 MINUTES



1 Ball for every player



5 Cones

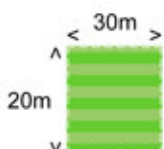


1 Goal

CONCLUSION



20 MINUTES



1 Ball for every player



16 Cones



Bibs in 3 different colours

LESSON 6

Practical Environmental and Climate Change Actions

Football Session 2

WARM UP

20 MINUTES

PHASE 1 (if required)



“Cleaning the Playing Field”

- ☛ All the players run over the playing field to collect refuse.
- ☛ While they are doing that, the coach can instruct them to do various running exercises or exercises with a ball.



Motivating
Story

There is a lot of refuse lying around. If one is a big group, this refuse can be cleared quickly. It is also important that one does not simply burn the refuse. It has to be sorted and then disposed of lawfully and environmentally friendly.

PHASE 1 (alternative)



“Separate your Waste”

- ☛ Various items are spread in a square (bibs, balls, cones).
- ☛ The task is to collect these items as quickly as possible and bring them to the side-line, sorted!
- ☛ The bibs have to be carried by two players, the balls have to be dribbled and the cones have to be balanced on the head.
- ☛ Two teams have to fulfil this task one after the other. Which team is quicker?

Variations

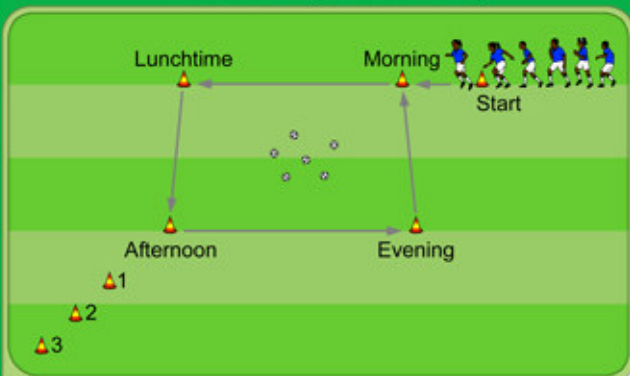
- ☛ With ball.



Practical Environmental and Climate Change Actions

Football Session 2

PHASE 2 A (choose one)



“Personal Water and Drinking Requirement”

⊕ The players run around the outside of the square. At every corner they have to perform a task for which they need to collect a ball:

△ **1st cone (Morning):** collect a ball from the centre of the square, dribble around the cone and return the ball to the centre. Return to the cone and carry on to the next corner.

△ **2nd cone (Lunchtime):** two players collect a ball from the centre and perform five passes within the square.

△ **3rd cone (Afternoon):** to begin with the players, without a ball, run to the first cone and back again, then to the second cone and back again, and then to the third cone and back again. When all the players have completed this part of the exercise, they have to repeat it, this time with a ball.

△ **4th cone (Evening):** the players have to juggle the ball.

⊕ After this exercise has been completed, the children can be asked to run around the square for as many times as they feel they can survive without water (→ 8 rounds!).



The four cones represent a time of day with which a certain activity is linked.

It is important that one drinks enough water during the day. Drinking water is symbolised by collecting a ball.

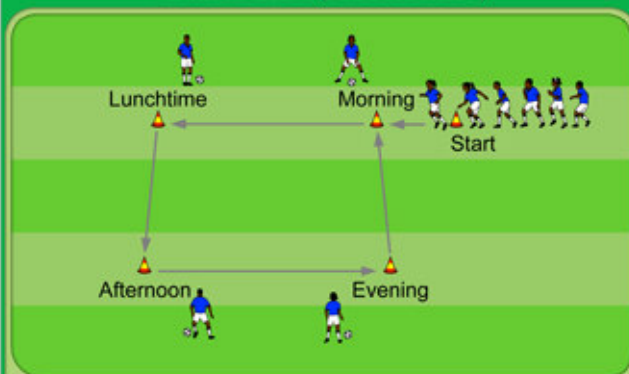
In the morning, after getting up, one should drink some water. At lunchtime water is used to cook a meal. As one does not cook for oneself only, two players have to perform this exercise together. Then during the afternoon the children do sports. Here the pressure is particularly high; therefore the children have to drink more water afterwards. During the evening the children again have to drink water with their supper.

LESSON 6

Practical Environmental and Climate Change Actions

Football Session 2

PHASE 2 B (choose one)



“Personal Water and Drinking Requirement”

- Again the players run around the outside of the square.
- This time though the players are not required to do exercises at the corners, only when a passer stands on the outside.
- These pass / throw a ball to the players, who then have to return the ball by various methods, e.g. normal low pass, volley, trapping the ball with the upper thigh, trapping the ball with the chest, header ...



The four cones still represent the different times of the day and the balls represent the water.

This time though the water is not used for drinking / cooking, but for hygiene. After standing up in the morning one needs water to freshen up. Before lunch one should wash one's hands. During the afternoon, after sport, one should shower. And in the evening one should definitely wash one's hands before supper.

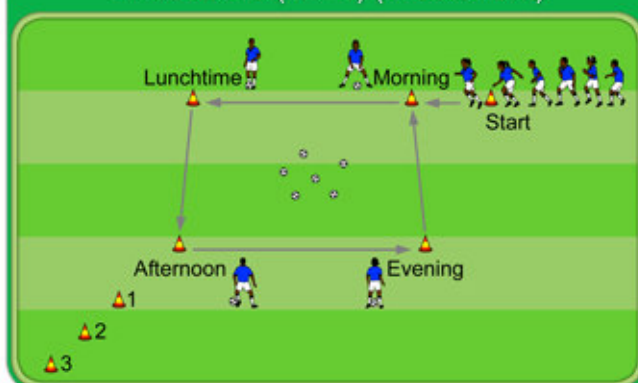
EXERCISE 2 A



EXERCISE 2 B



PHASE 2 C (A + B) (choose one)



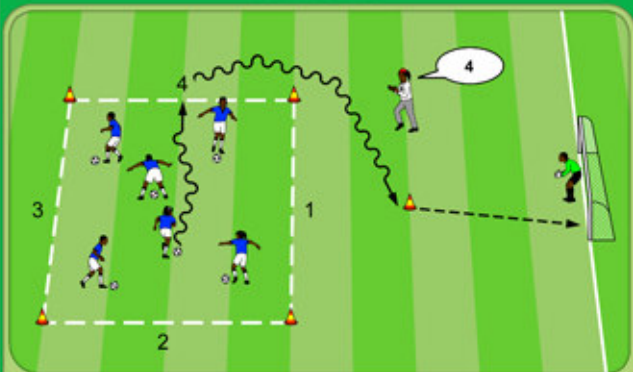
Practical Environmental and Climate Change Actions

Football Session 2

MAIN PART

50 MINUTES

PHASE 1

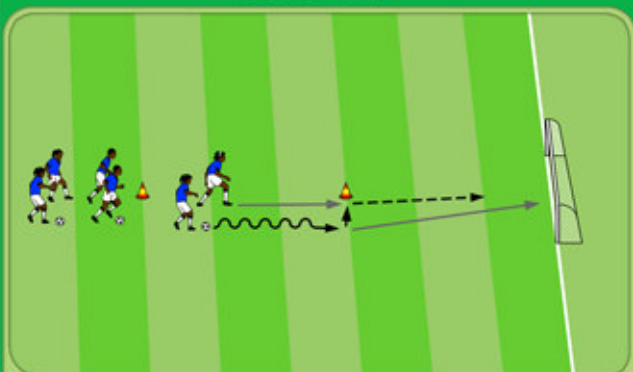


It is important to be aware that nature may not be destroyed. Only who heeds this may shoot a goal.

"Be careful"

- ☞ All the players dribble in the playing field.
- ☞ The coach gives them different exercises, e.g. only with left, right ...
- ☞ The coach then calls one player and a number. The player has to dribble across that line as soon as possible.
- ☞ All the other players turn into trees (arms out wide → branches) which the player may not touch.
- ☞ If the player manages to leave the playing field without touching the other players, he/she must run to the cone from where he may shoot a goal.
- ☞ The other players carry on dribbling in the playing field.

PHASE 2 A



The first player is an environmental polluter.
The second player cleans up the refuse after him.
He then flings the refuse at him so that the first player realises that next time he should take his refuse along and dispose of it properly.

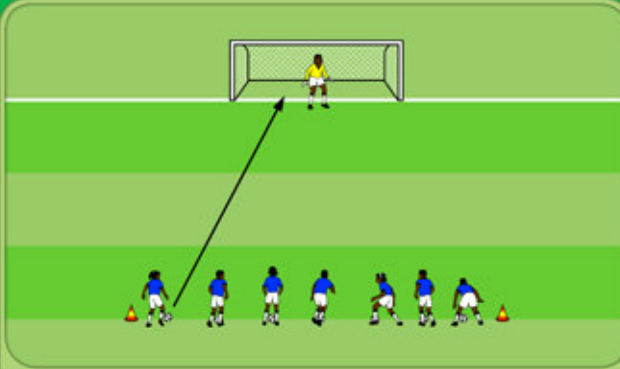
"Goal Shooting Exercise"

- ☞ The players play in pairs.
- ☞ One player dribbles towards the goal with the ball, but leaves it at the cone. He/she runs on to the goal without the ball.
- ☞ The other player comes up shortly after him/her and shoots the ball at the goal.

Practical Environmental and Climate Change Actions

Football Session 2

PHASE 2 B



“Goal Shooting Exercise”

- The players shoot at the goal, one after the other.
- If a player does not manage to score a goal, the whole team has to run around the goal once.



The children have to dispose of the refuse, but if it does not land in the “bin”, they will be punished.

Practical Environmental and Climate Change Actions

Football Session 2

CONCLUSION

20 MINUTES

GAME



This is a good endurance training exercise!

"Handicap Game"

- ☞ There are three teams.
- ☞ Two teams play against each other on the playing field.
- ☞ The third team dribbles around the field.
- ☞ The third team decides how the players on the field have to play, i.e. if the team dribbles or stretches (trees), then the field players can play without any handicaps.
- ☞ If the team should take a ball in the hand (stretched to the front as a steering wheel), the field players may play with two ball contacts only.
- ☞ If the team passes the ball through the cone goals, the field players have to play directly.
- ☞ The tasks are swapped after five minutes.



The third team represents the degree of air pollution. If there are a lot of cars driving next to the playing field or someone is burning refuse, the pollution of the air increases and it is more difficult for the field players to score a goal.

Conclusion, Reflection & Action Planning

Conclusion

Life on our planet as we know it is under threat as a direct consequence of human activity. Pollution of our atmosphere is causing global warming which in turn is causing our climate to change bringing with it increased natural disasters and changes to the environment. The health of far too many is being damaged by pollution of our air, water and soil. Water suitable for drinking is becoming scarce. Land is being eroded. Habitats are being polluted and damaged leading to loss of animal and plant life and major impacts on biodiversity.

If we are to reverse the damage we have been causing since the onset of industrialisation, everyone needs to take responsibility and to start mitigating and offsetting the damage we are causing to the environment.

Everyone has a role to play from national governments to major corporations to individual citizens. We all need to take responsibility for our environment. Our failure to do this will have dire consequences for future generations.

Pollution and climate change is already impacting on the lives of the poor and is contributing to increased poverty. People living in poverty are the least well placed to adapt to changes to the environment and the consequences of climate change. This is why ensuring environmental sustainability is one of the millennium development goals.

YDF coaches can contribute to environmental sustainability by incorporating messages around the environment into their football programmes. If we can raise the awareness of the youth around the importance of the environment through, we will produce a generation of champions. Champions, not just in football, but also for the environment.



Reflection

Having had the time to read this manual and participate in an environmental awareness workshop, we would encourage you to take the time to reflect on what you can do to make a positive difference to the environment.

- ☞ Reflect on how you can use the knowledge you have gained to become an advocate of environmental protection in your community?
 - ▲ How can you lead by example?
 - ▲ What are you going to do differently that will help mitigate or offset climate change?
- ☞ Reflect on how you will integrate environmental protection into your football programme?
 - ▲ What things will you do to educate youth on the environment?
- ☞ Reflect on how you can work in your community to promote environmental matters?
 - ▲ What other organisations exist in your community that are working on environmental issues?
 - ▲ Is the environment on the agenda of your local community councils? What can you do as a football coach or football club to support the community's efforts to encourage environmental awareness and good practice?



Conclusion, Reflection & Action Planning

Action Planning

Having taken the opportunity to reflect on what you can do individually, with the football team, and with your community, to address challenges to the environment and climate change, it is now time for you to plan to take action.

Set some short term and long term goals and write these down. What are the things that you can start to do immediately? These can be your short term goals. What could you achieve in the long term given some time to plan actions? These can be your long term goals.

When setting goals you can use the **GROW** model.

- G** for Grow - What is it you want to achieve.
- R** for Realistic - Make sure that your goal can realistically be achieved. If not, you need to revise your goal.
- O** for Options - Consider how you are going to achieve your goal. What steps will you need to take? Will you have different options? What options will be the best for you to action?
- W** for Will - Consider whether you, your players or your community have the will to see this through and achieve your goal. If you do not believe the will exists, then you need to revise your goal and set a new goal that would be easier to achieve. It is better to make a small contribution than not to succeed and make no contribution at all.

When you are action planning, why not set some goals for yourself, some goals for the club/team, and some community based goals. Share your personal goals with your friends and family, they will help you achieve them. Involve the youth in your team/club in setting goals for them to achieve. Consult other environmental champions in your community and see how you can collaborate to achieve goals for community activation.

Action Planner

YDF Coaches can use a simple action planner such as the one shown here to set short and long term goals:

Goal	Realistic	Options	Will
<u>Short Term</u> All players will reduce the amount of water wasted at coaching sessions.	Yes	Each player to bring a water bottle to training and to fill from the tap taking care not to spill water unnecessarily. A sign will be placed next to tap stating that our country needs to save water and that the tap should never be left running.	Our players will develop the will to achieve this goal through our football sessions which will educate them that water scarcity is not far from us.
<u>Long Term</u> Our club will reduce our carbon footprint.	Yes	The club will find a donor to gift cultivate these around the football field. The club will ensure that players share transport to matches and will only use transport that is well maintained.	We will discuss at our club executive the importance of addressing climate change and reducing our carbon footprint. We will create an environmental policy and action plan.



Lesson 2

Air

Taking Action to Help Prevent Climate Change & Keep our Air Clean

How should we mitigate and adapt to address climate change and to keep our air clean. Using this worksheet you can identify ways how individuals, teams and communities can:

- ☞ a) help prevent climate change
and
- ☞ b) keep our air clean.

Examples

Action by Individuals

- ☞ Use a bicycle.
- ☞ Opt for solar powered water heating.
- ☞ Avoid burning fuel in places without proper ventilation.
- ☞ Ensure our motor vehicle is properly maintained.

Action by Football Teams

- ☞ Eat less meat and more vegetables.
- ☞ Plant trees around the football field.
- ☞ Share transport to matches.
- ☞ Use solar powered floodlights.

Action by the Community

- ☞ Campaign for cleaner and integrated transport systems.
- ☞ Introduce recycling programmes.
- ☞ Conduct education campaigns around the dangers of polluted air to health.
- ☞ Campaign for renewable energy sources.

Please turn over this page and list some actions that you, your football team, and your community can take to keep air clean...



Lesson 2
Air

What can I do?

To help address climate change?

To keep our air clean?

What can my Football Team do?

To help address climate change?

To keep our air clean?

What can my Community do?

To help address climate change?

To keep our air clean?

Lesson 3

Water

Taking Action to Save Water and to Keep Water Clean

How should we mitigate and adapt to save water and to keep water clean. Using this worksheet you can identify ways how individuals, teams and communities can:

- ☞ a) avoid wasting and save water
and
- ☞ b) can help prevent water pollution.

Examples

Action by Individuals

- ☞ When brushing your teeth or shaving do not do so under a running tap.
- ☞ Take a shower rather than a bath.
- ☞ Do not pour chemicals down the drains, take them to a waste disposal drop off point instead.
- ☞ Do not litter, take your plastics home with you and recycle.

Action by Football Teams

- ☞ Irrigating the football field when the sun is down, early morning or in the evening.
- ☞ Wash the team kit together, rather than have eleven small individual washes.
- ☞ Have the team and fans clean litter from around the football field before and after each game.
- ☞ Provide proper ablutions for use by players and fans.

Action by the Community

- ☞ Report water leaks to the authorities and ask them to repair quickly.
- ☞ Ask people to collect rainwater for use in irrigating plants.
- ☞ Campaign for mines and factories to not contaminate local water supplies.
- ☞ Get recycling campaigns going in the community.

Please turn over this page and list some actions that you, your football team, and your community can take to save water and to keep water clean...



Lesson 3
Water

What can I do?

To save water?

To keep water clean?

What can my Football Team do?

To save water?

To keep water clean?

What can my Community do?

To save water?

To keep water clean?

Lesson 4

Soil

Taking Action to Protect the Physical Environment and Avoid Pollution

How should we mitigate and adapt to threats to our soil. Using this worksheet you can identify ways how individuals, teams and communities can:

- a) help protect their local environment *and*
- b) avoid pollution.

Examples

Action by Individuals

- Plant trees and plants.
- Use natural fertilisers and avoid using too many chemicals.
- Recycle waste.
- Always take your waste home.

Action by Football Teams

- Plant trees or bushes around the football field.
- Provide bins for waste and ensure these are emptied.
- Organise pre-training clean ups.

Action by the Community

- Turn areas of waste ground into green areas with grass, shrubs and trees.
- Support developments that do not require the use of greenfield sites and that make good use of land.
- Conduct anti-litter and anti-dumping campaigns.
- Encourage recycling schemes.

Please turn over this page and list some actions that you, your football team, and your community can take to protect the physical environment and avoid pollution...



Lesson 4
Soil

What can I do?

To protect my physical environment?

To reduce pollution?

What can my Football Team do?

To protect my physical environment?

To reduce pollution?

What can my Community do?

To protect my physical environment?

To reduce pollution?

WORK SHEETS

Lesson 5 Biodiversity

Promoting Biodiversity

What can we do to protect our local environment and promote biological diversity?

Camels Under Threat

Wild camels in the Arabian Desert are eating plastic that is blown in from the urban settlements. They cannot digest the plastic and it reduces their appetite leading to them literally starving to death.

One in every two wild camels is under threat!

What can people do to reduce this threat to the biodiversity of the Arabian Desert?

Threats to your local Biodiversity

Consider the biodiversity of the local environment you live in or near. What are the threats to it? Consider urbanisation, alien species, pollution, over farming or fishing, land or soil erosion, etc.

List the threats here:

List what steps could be taken to address these challenges:



Lesson 6

Practical Environmental and Climate Change Actions

List ten things that you as an individual can do to help protect our environment and address climate change.

• _____

• _____

• _____

• _____

• _____

• _____

• _____

• _____

• _____

• _____

• _____

• _____

Lesson 6

Practical Environmental and Climate Change Actions

Team Action Plan

Devise a ten point team action plan that your football team can follow that will help them protect our environment and address climate change.

1

2

3

4

5

6

7

8

9

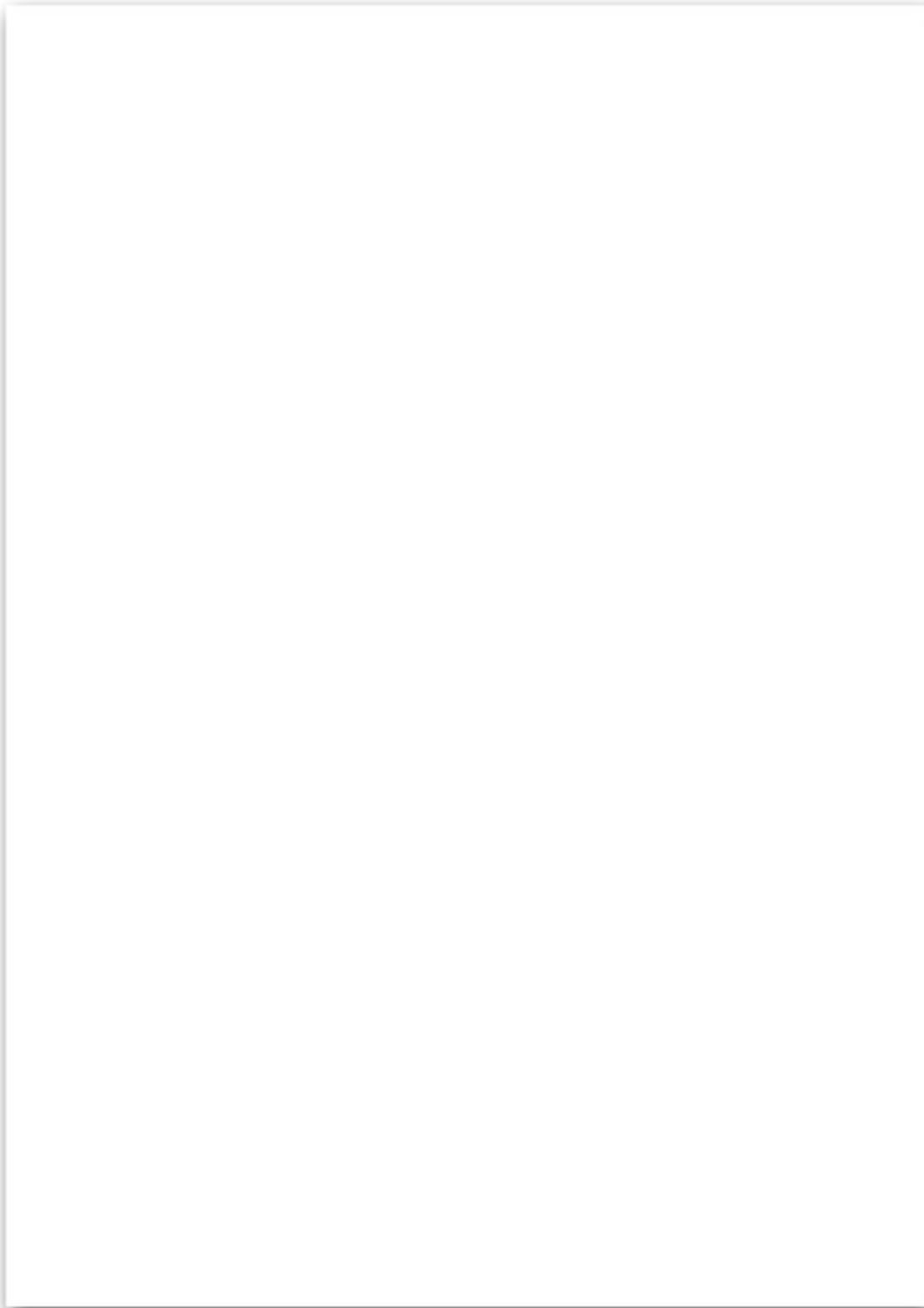
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Lesson 6

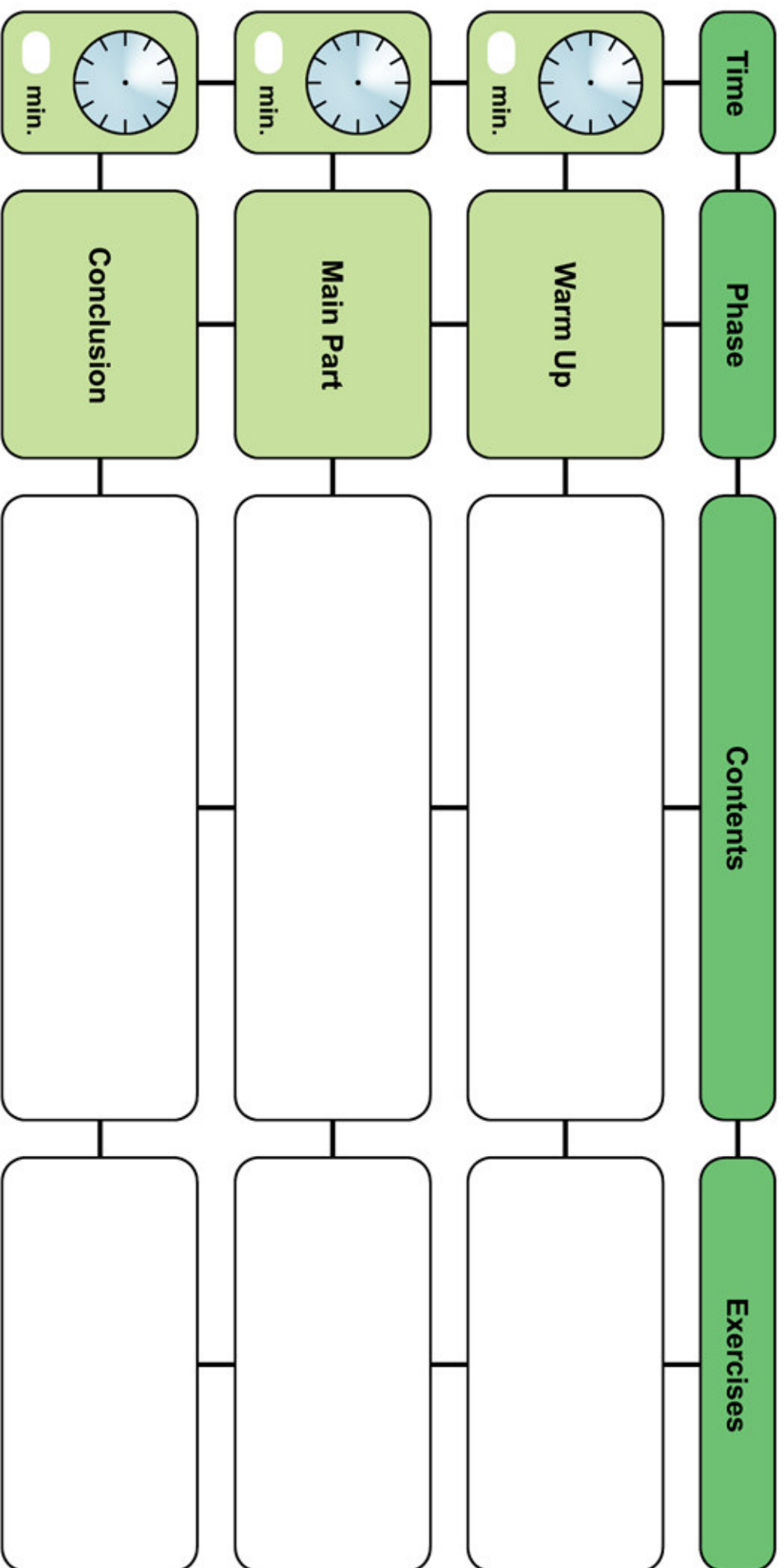
Practical Environmental and Climate Change Actions

Design a poster that urges your community members to respect the environment and contribute to action against climate change.



TRAINING SHEETS

Structure of a Training Session



Planning / Monitoring Sheet

Date: DD/MM/YYYY

Venue:

Organiser:

Number of Players:

Objectives / Focal Points:

1. WARM UP

Time:

Training Method 1

Procedure / Organisation:

Variation:

Training Method 2

Procedure / Organisation:

Variation:

Planning / Monitoring Sheet

2. MAIN PART

Time:

Training Method 1	
Procedure / Organisation:	
Variation:	

Training Method 2	
Procedure / Organisation:	
Variation:	

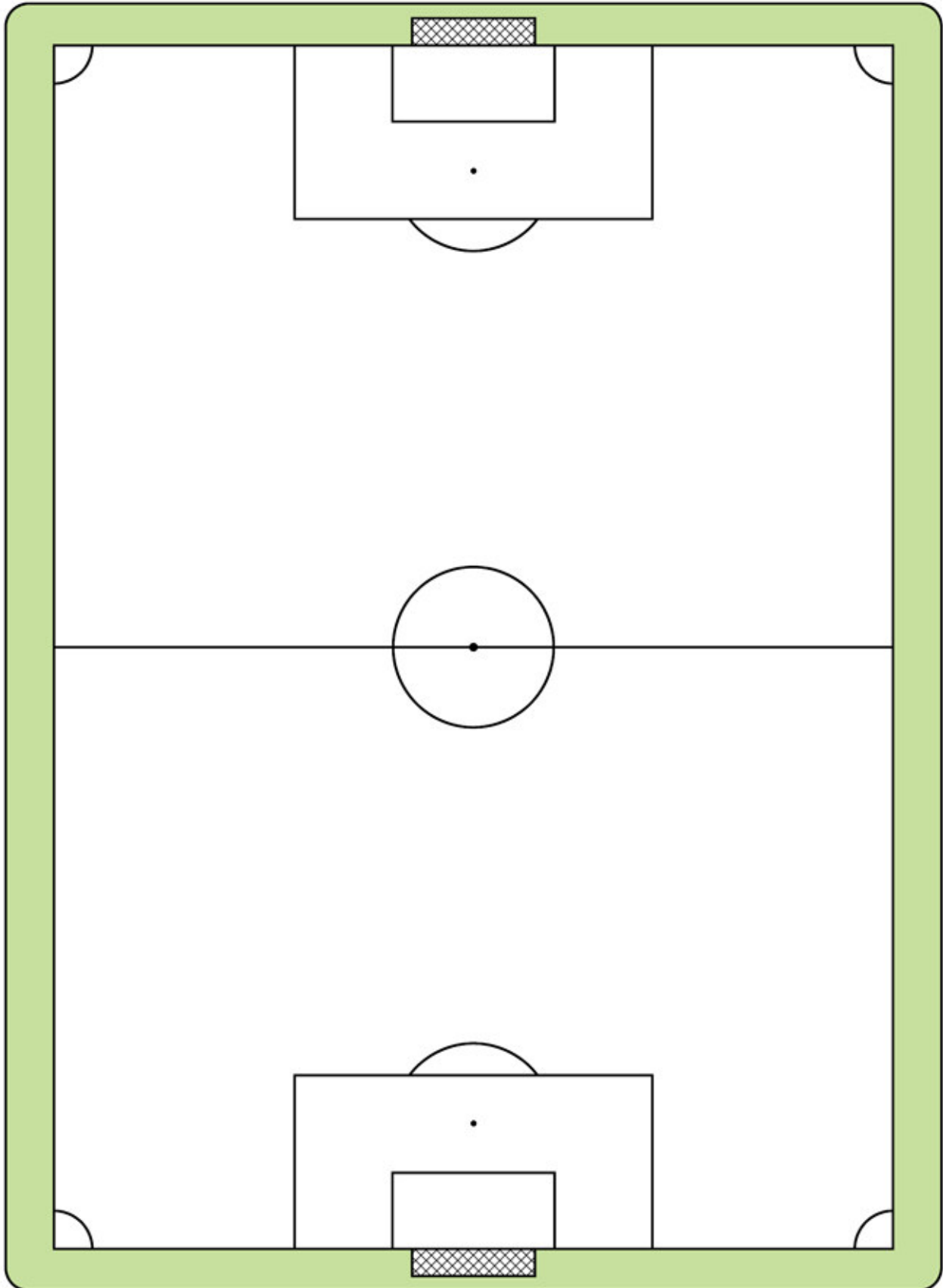
3. CONCLUSION

Time:

Training Method 1	
Procedure / Organisation:	
Variation:	

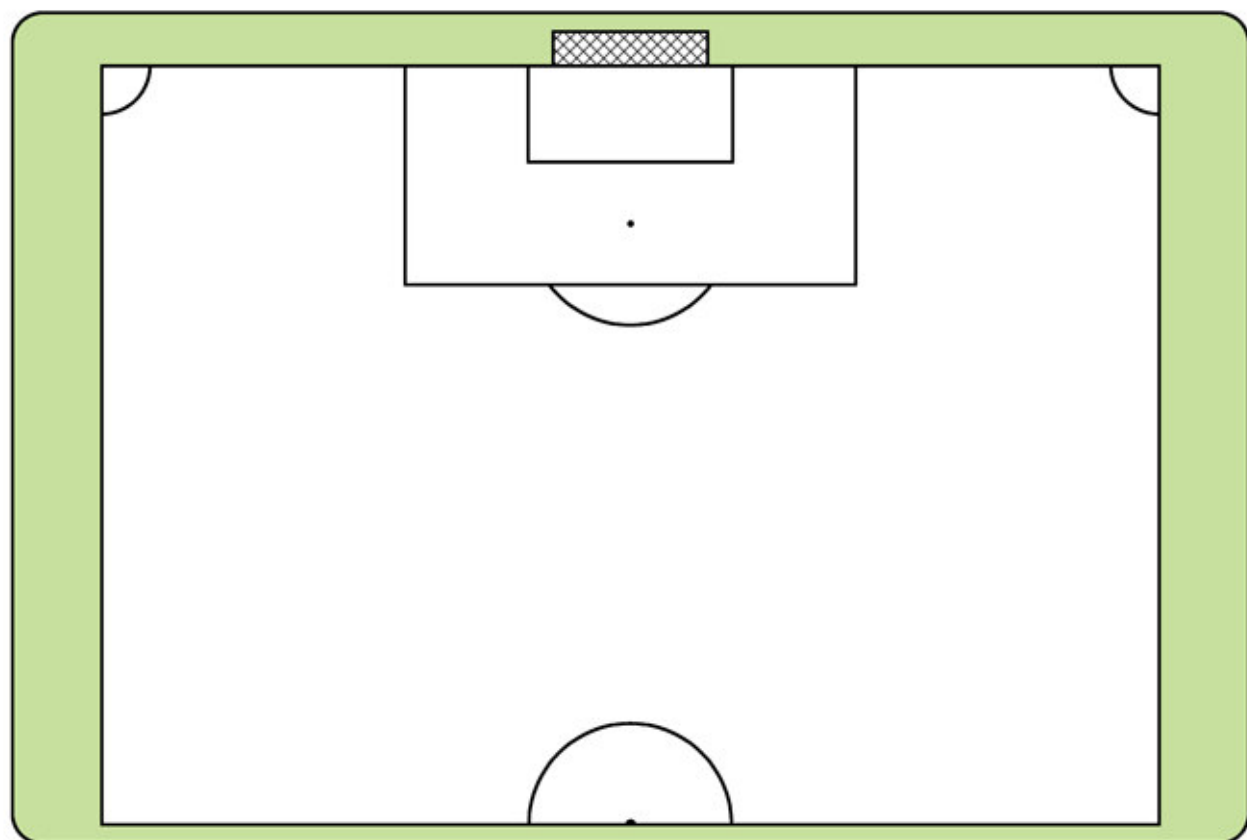
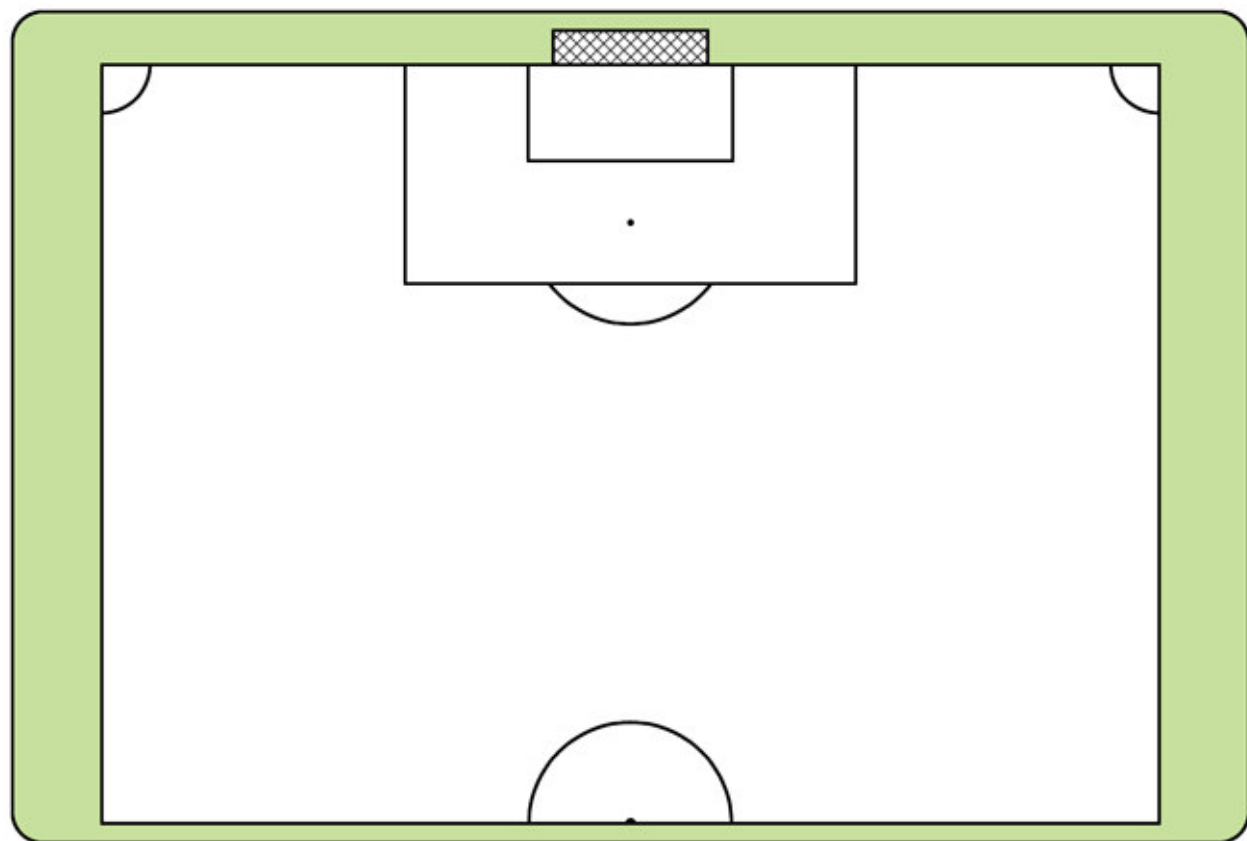


Pitch - Full
With lines and goals

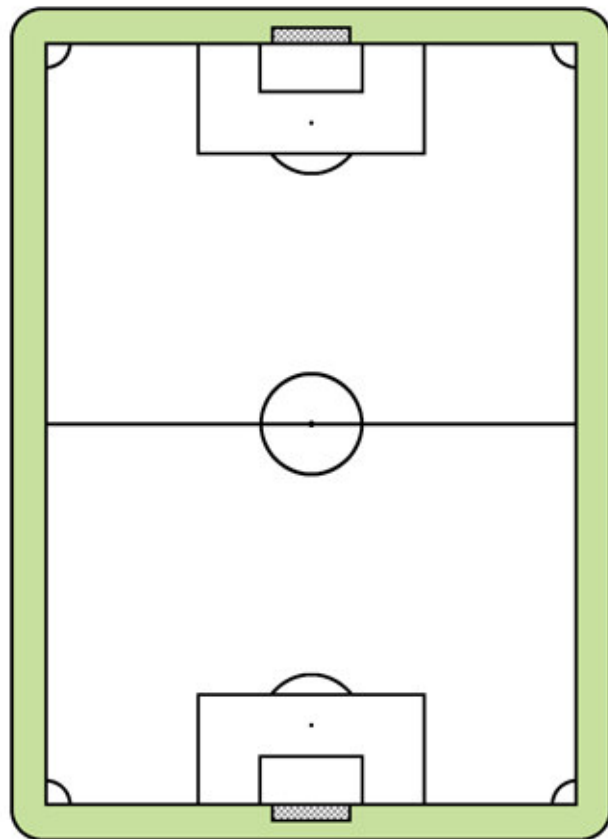
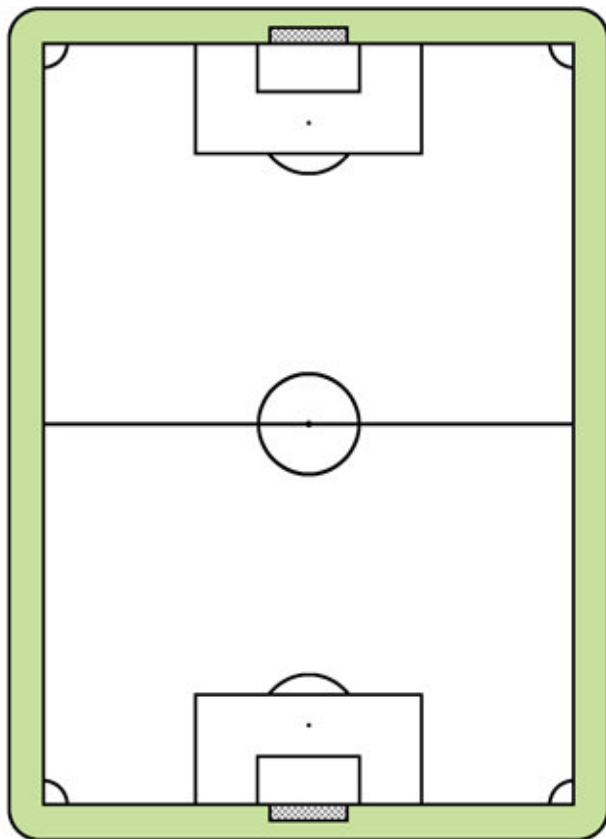
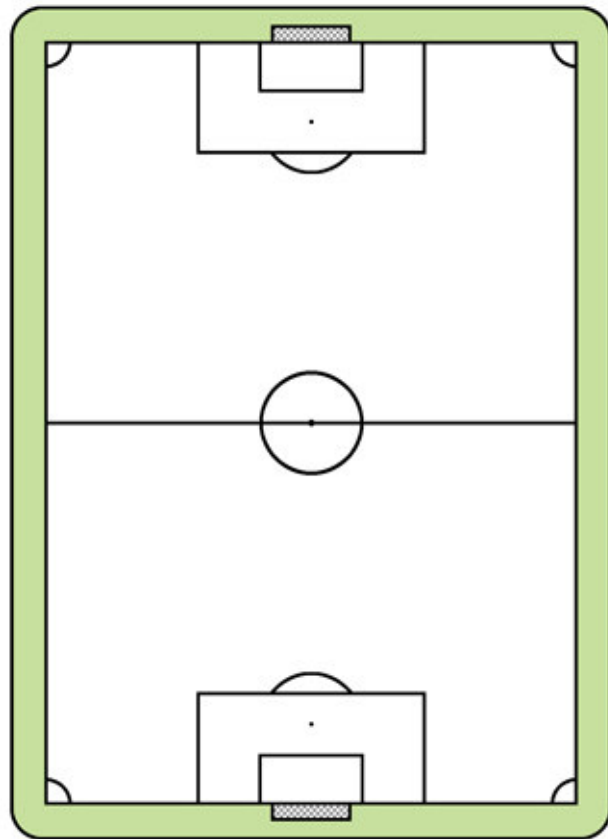
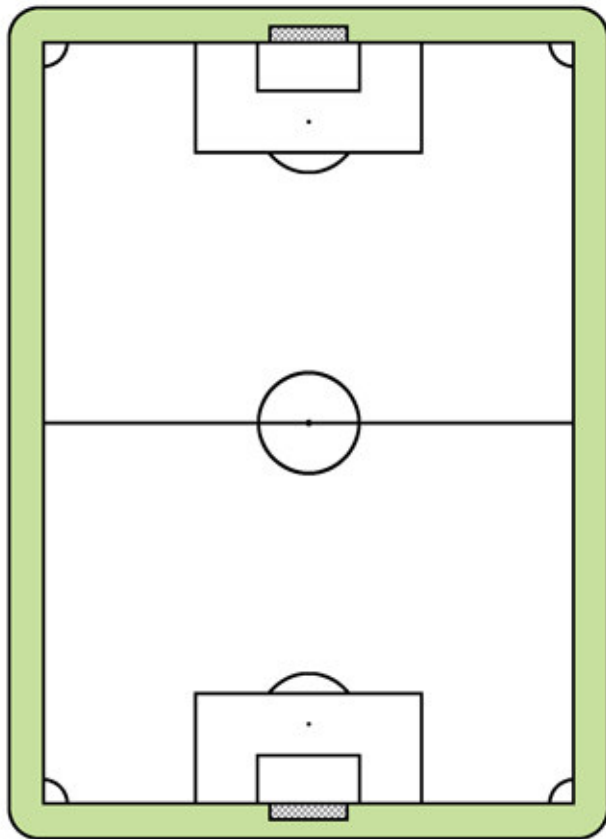


TRAINING SHEETS

Pitch - Half x 2
With lines and goals



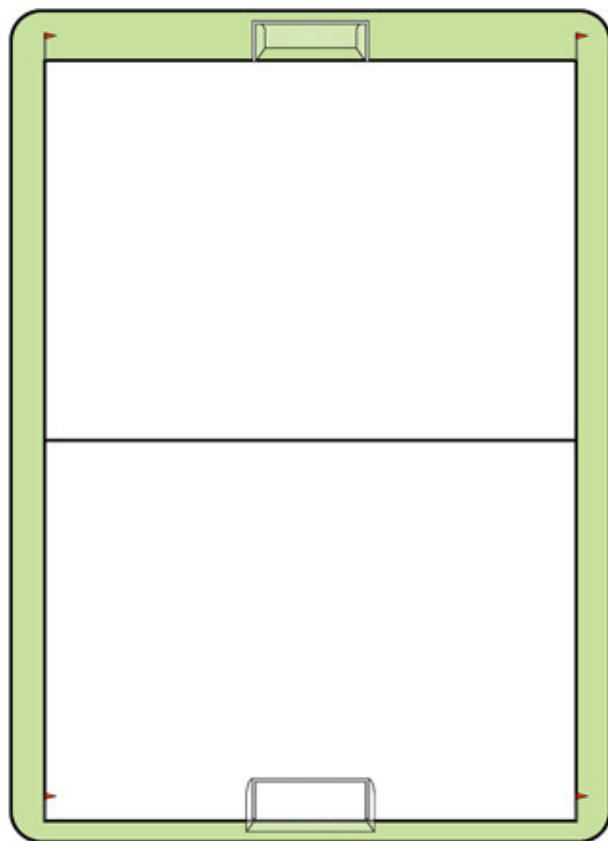
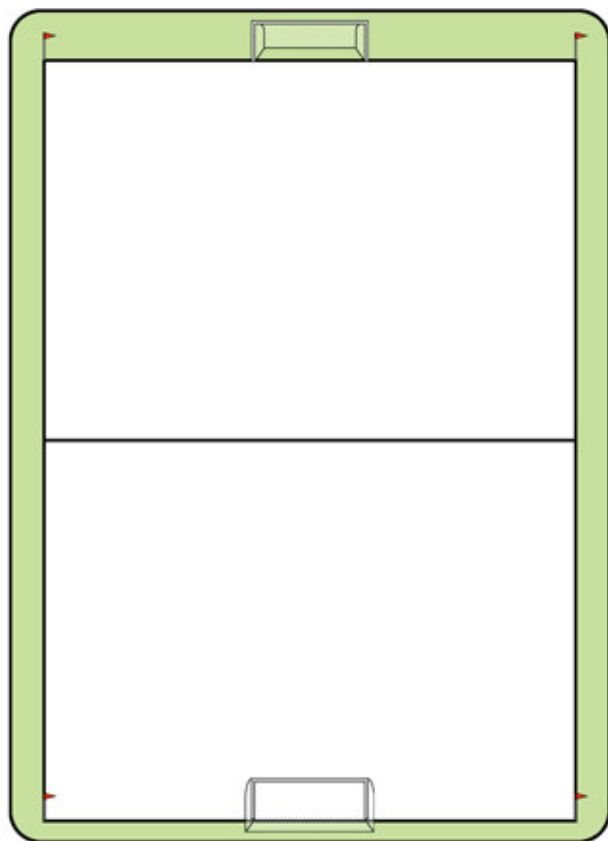
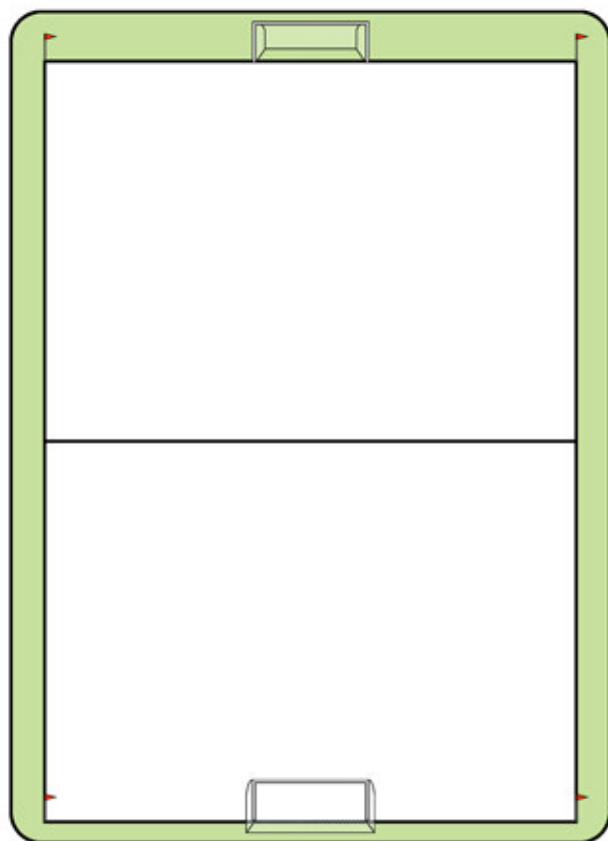
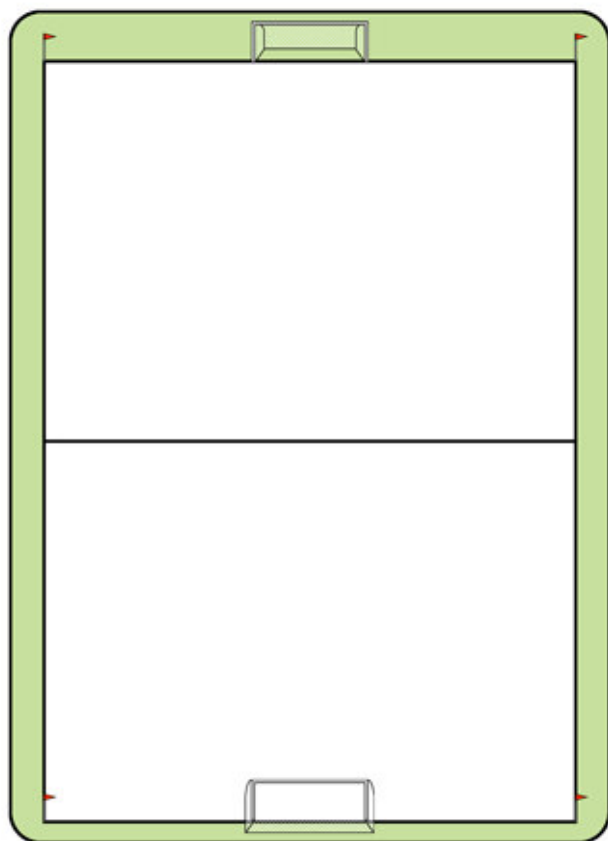
Pitch - Full x 4
With lines and goals



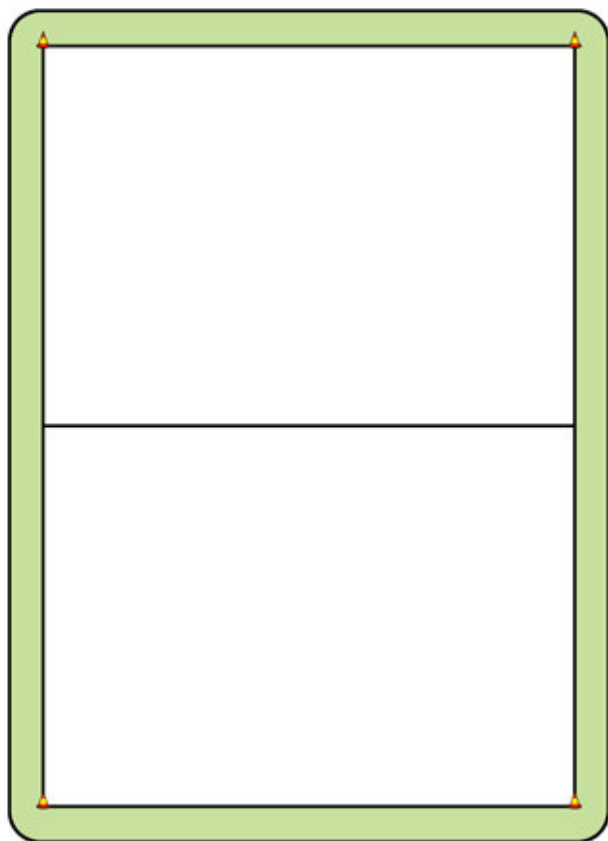
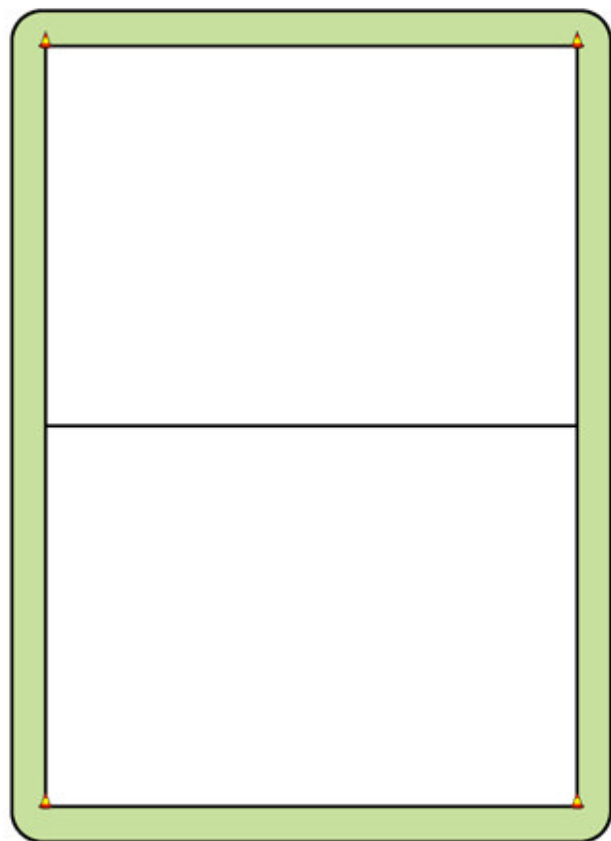
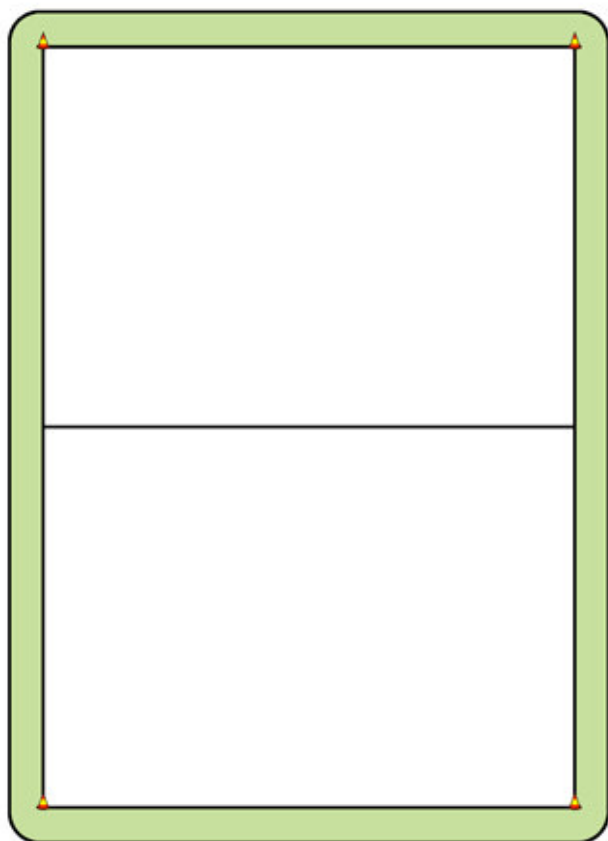
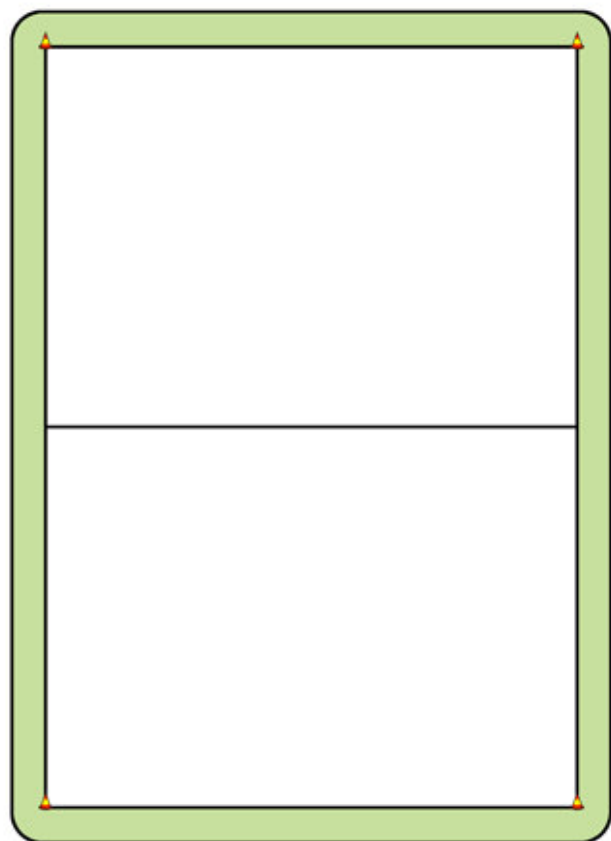
TRAINING SHEETS

Pitch - Full x 4

Without lines, with goals



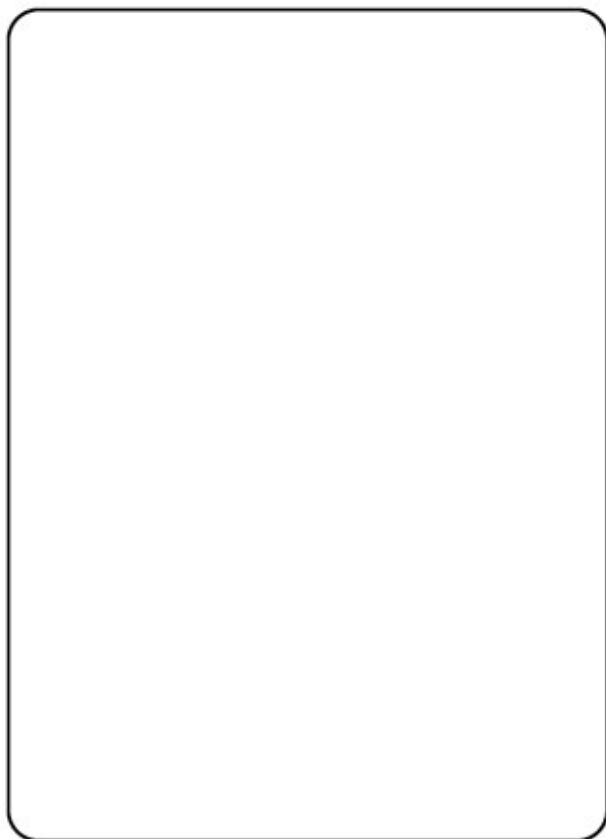
Pitch - Full x 4
Without lines and goals



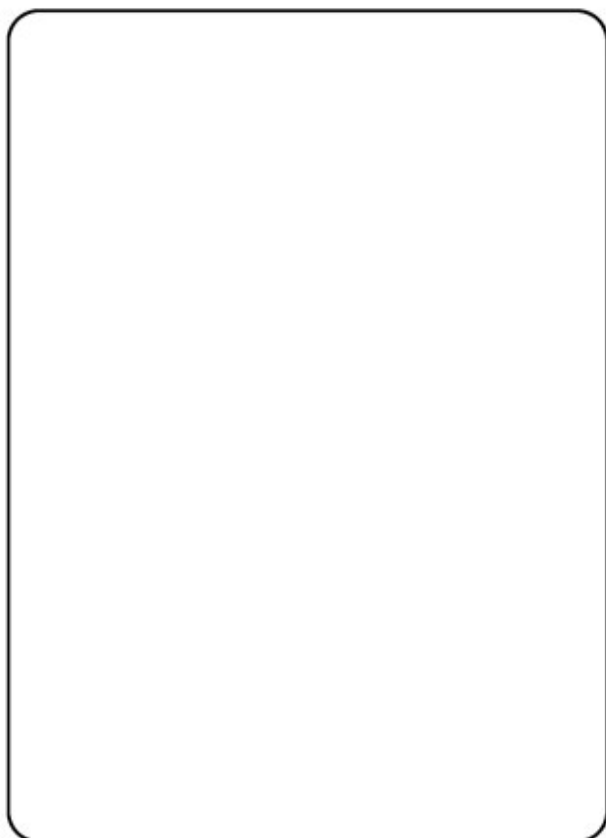
TRAINING SHEETS

Cells and Notes x 2

Without any markings



Notes:



Notes:



