SWAT equipment

SWAT teams use equipment designed for a variety of specialist situations including close quarters combat in an urban environment. The particular pieces of equipment vary from unit to unit, but there are some consistent trends in what they wear and use.

Clothing

Aside from the standard uniforms of their parent law-enforcement organizations, SWAT personnel often wear similar utility uniforms to armed-forces tactical uniforms, with the main difference being the colorations of such utility uniforms. SWAT utility uniforms are generally in solid colors, usually not limited to dark grey, dark blue, or black. However, "urban camouflage" patterns have been developed, consisting mainly of black, white, and shades of gray.

Whenever their personnel are not on immediate-crisis duty, SWAT team members' uniforms are often not entirely black in color, and otherwise resemble the duty uniforms of their parent law-enforcement organizations.

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УДК 811.111:502

## THE ECOLOGICAL FOOTPRINT

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This research work refers to the analysis of environmental issues such as the history of ecological footprint and the prospects of sustainable development, regarded as of the most topical issues today. The key concepts and the points touched upon in the investigation are ecosystems, ecological footprint, its calculation methods, accuracy and the ways of reducing ecological footprint themselves.

Ecosystem is referred to as a biological system consisting of a community of living organisms, their habitat, communication systems, exchanging matter and energy between them. The integrity of the ecosystem being a basic component for sustainable development must be observed. As it goes from the definition environment plays a crucial role in developing all the four spheres of life, such as economic, political, material and spiritual sectors. Due to the bad environmental state on the Earth and people's concerns the term 'Ecological Footprint' has been highly used by the scientists involved in this problem.

The term 'Ecological Footprint' is defined as a measure of human demand on the Earth's ecosystems. It represents the amount of biologically productive land and sea area necessary to supply the resources.

The first academic publication about the ecological footprint was by William Rees in 1992. The ecological footprint concept and calculation method was developed as the PhD dissertation of Mathis Wackernagel, under Rees' supervision at the University of British Columbia in Vancouver, Canada, from 1990–1994. Originally, Wackernagel and Rees called the concept "appropriated carrying capacity". To make the idea more accessible, Rees came up with the term "ecological footprint," inspired by a computer technician who praised his new computer's "small footprint on the desk." In early 1996, Wackernagel and Rees published the book *Our Ecological Footprint: Reducing Human Impact on the Earth*.

Ecological footprint analysis compares human demand on nature with the biosphere's ability to regenerate resources and provide services. It does this by assessing the biologically productive

land and marine area required to produce the resources a population consumes and absorb the corresponding waste, using prevailing technology. Footprint values at the end of a survey are categorized for Carbon, Food, Housing, and Goods and Services as well as the total footprint number of Earths needed to sustain the world's population at that level of consumption.

Per capita ecological footprint (EF) is a means of comparing consumption and lifestyles, and checking this against nature's ability to provide for this consumption. The tool can inform policy by examining to what extent a nation uses more (or less) than is available within its territory, or to what extent the nation's lifestyle would be replicable worldwide.

It must be stated that there is a variety of online footprint calculators such as Global Footprint Network, WWF Footprint Calculator and others (see figure 1).





Fig 1 – Footprint calculators

Therefore, the accuracy of the Footprint measurements highly depends on such factors as calculation parameters, certainty of source data and methodological decisions.

The comparative analysis in the form of the graphs, diagrams and tables in terms of interdependence between a country's lifestyle and its footprint has been provided in the work. Out of the nine countries (the USA, The UK, Argentina, Germany South Africa, China, India, Latvia, Belarus, Russia) having been inspected India showed the best results having the lowest ecological footprint and the USA has been detected as the country with the highest ecological footprint. The data obtained shows that these are mainly industrial factors, technological advancement and peoples' habits that influenced the results. India still being an agricultural country with a high appreciation of spiritual values and the modesty of its people is characterized as ecologically concerned state; whereas the USA being a highly industrialized country with advanced economy and living according to the motto of 'American Dream' has shown a high level ecological unsustainability.

It must be mentioned that the experimental investigations carried out in Belarus concerning the problem discussed that the Belarusians is an ecologically concerned nation judging by their habits and lifestyle. For instance, living in blocks of flats rather than private cottages and reusing plastic bags.

Irrespectively of the method applied the figures obtained in all the experiments regarding Ecological Footprint are tremendously high, that is why ecologists are tightly working on the development of ways to reduce the amount of Ecological Footprint. The most efficient being in use are following '3R' principle which implies *reduce*, *reuse*, *recycle*; to use public transport and walking or cycling short distances more often than driving a car; to travel by train or by bus rather than by plane; to save water and electric energy at home and at the working place; to use recycled products, avoid the use of plastic bottles, plastic bags and cans, encourage community to use tap water rather than bottled water; to use less packaging; to plant and nurture trees as much as possible; to involve every member of your family and friends to proactive get necessitated in raising awareness about the need to reduce the ecological footprint on an individual level (see figure 2).



Fig.2 '3R' principle

Today humanity uses the equivalent of 1.5 planets to provide the resources we use and absorb our waste. This means it now takes the Earth one year and six months to regenerate what we use in a year.

Moderate UN scenarios suggest that if current population and consumption trends continue, by the 2030s, we will need the equivalent of two Earths to support us.

Turning resources into waste faster than waste can be turned back into resources will put us into global ecological overshoot, depleting the very resources on which human life and biodiversity depend. The result is collapsing fisheries, diminishing forest cover, depletion of fresh water systems, and the buildup of carbon dioxide emissions, which creates problem of global climate changes. It must be taken into consideration that these are just a few of the most noticeable effects of overshoot.

Thus, the figures and the data provided in the article show and prove the topicality of the issue and the solvability of environmental problems rely on people's ecological education which is awareness for the need to solve environmental issues; taking actions supporting the ideas of sustainable development that help to reduce ecological footprint; changing lifestyle habits; using clean and green sources (wind, solar or tidal power); taking care of nature.

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