

#### Available online at http://journals.usamvcluj.ro/index.php/promediu



**ProEnvironment** 

ProEnvironment 9 (2016) 183 - 186

# Original Article

# Study about the Establishment of an Educational Center in a **Pedagogical Forest**

ILEA Marioara, Alexandra MOŞ-BUTEAN, Liviu HOLONEC\*

<sup>1</sup>University of Agricultural Sciences and Veterinary Medicine, Faculty of Horticulture, St. Calea Mănăştur, no. 3-5, Postal Code 400372, Cluj-Napoca, Romania

> Received 20 July 2016; received and revised form 25 August 2016; accepted 1 September 2016 Available online 28 September 2016

#### **Abstract**

The current research foresees a diagnosis regarding the evaluation of a forest that has a pedagogical role. The study assumes the establishment within the forest Hoia - Cluj-Napoca of an area of research, stimulation and awareness for all the society. The educational centre is intended to be implemented with the help of the Department of Forestry of USAMV Cluj-Napoca. The project assumes the establishment, in a forest with social interest, of an area of research, stimulation, awareness, and by this meaning pedagogical, for the whole society. It will be a place for recreation, but at the same time will gather information regarding the vegetation, fauna and the major role they play in the future existence of the human species.

**Keywords:** educational centre, economical diagnosis, pedagogical forest.

#### 1. Introduction

Pedagogical forests assume the ongoing educational activities in the middle of the forests, directed by a multidisciplinary team of teachers, students and foresters. Priority, The pedagogical forests tries to encourage young audience regarding nature, tries to raise the public's awareness for biodiversity and the protection of the landscape [1]. The aim of this research is to estimate the benefits of this center regarding the aware three levels: social, economic and environmental. The education for forest protection is intended to improve the quality of life through knowledge, but especially through the motivations that it offers in order to give forests the necessary attention and care.

\* Corresponding author. Tel: +40-264-596384 Fax: ++40-264-593792

e-mail: lholonec@usamvcluj.ro

The implementation of these activities by pupils along with students, teachers, parents and other community members in an educational center that is specially arranged in the middle of a forest, it is an effective way to make consciously environmental education that can solve some of the environmental problems [2].

### 2. Materials and Methods

In order to estimate the abilities of this center it is necessary to give a general diagnosis regarding the educational center functions [4]. As location, we opted for Hoia Forest which is used as an recreation area, it belongs to Cluj-Napoca's Hall and is best suited for this educational center, both in terms of access and possession of a vast range of species and socio-cultural interests. In this way, the beneficiaries will be able to know better the forest ecosystems that are specific for our country.

# 3. Results and Discussions

The business process involves actions through which the visitors will assimilate information about the functioning of a forest, starting with the species of trees, bushes, current fauna, making a tour through the pedagogical forest and then will be led towards the documentation center where they will complete the information received previously, or they will be able to receive answers to the questions already raised, as they will be oriented towards a competent person who will provide them with an even broader view on the bioclimatic floors, also about the integrity and mystery of this ecosystem, focusing on each function separately.

The profile and pedagogical practice through which the students will benefit from activities developed in accordance with the education plan will be meant to verify the practical applicability of the theoretical knowledge acquired by them within the training program, in the form of an agreement between the practice organizer, practice partner and the practicing student.

The pre-university education curriculum implies extracurricular activities.

The pedagogical forest will be the right place for such activities, providing students and teachers with a vast array of opportunities through the SILVO School programme (plantation of trees in a designated area, ecologization activities, picking berries, mushrooms; artistic, cultural and musical activities in the forest).

The pedagogical forest will be a source of research, knowledge and science development, a means of education, culture and human civilization, factor of conservation of the landscape, ecological and biological diversity.

As for the pedagogical forest, benefits will be recorded regarding the economic, social aspects and also relating to the conservation and sustainability of the area:

- The entrance fee provides economic benefits
- The timber harvested ensures sustainability, but also economic and financial resources
  - The forest is a source of health

The thinning of stands (weeding, cleaning, thinning) known in the literature under the name of cultural operations, are aimed primarily at obtaining valuable stands, capable of efficiently capitalizing the forest-productive potential through increased accumulation of biomass.

The volume of wood harvested from the forest area will provide economic and financial benefits to the management of this pedagogical forest.

Following the commercial diagnostic, it is estimated that the service users of the education

center will be persons who are in the learning process, being included in the minor age category, but especially persons who are part of the university and professional education.

Another category of beneficiaries will be persons with certain disabilities who have not had the chance to be in contact with nature. For this category of persons, special devices will be set so that the information is properly transmitted to them.

The main source of income will be the entry fee, which is estimated as follows: 20 lei for adults, people with disabilities 5 lei, 5 lei for children, 10 lei for students, groups of at least 10 people will receive a discount of 5% of the full price.

Another source of income will be the exploitation of forest species, and not only, within the establishment. In this case, we assume that for the human resources level it will be a need of 8 employees:

- forestry engineer,
- student,
- caregiver,
- administrator with pedagogical specialization, nurse.
- accountant,
- a public relations specialist and
- a person responsible for security and protection.

Regarding the economic and financial diagnosis, we estimate the need to build an endowment of approximately 45,500 euro, represented in tangible, personal capital, circulating assets and attracted resources.

Measuring the economic value we estimated both the costs and the benefits that the establishment of this center would suppose.

In the field in which we want to operate, there is no obvious competition.

The field is developing and we can say that there is no such educational center anywhere in our country.

Analyzing the future benefits of the pedagogical forest and lowering the costs arising from the establishment and operation of this center, we can support the sustainability and profitability of this education center.

This is why we considered necessary the achievement of this project in order to develop entrepreneurship among students.

In order to offer you a visual image of this special space, we inform you that next to each tree species will be an audio device which, in the moment

you activate it, will provide information on that specie, in terms of consistency and the impact that it might have on analyzers. In the middle of the arranged space there will be a building with role of documentation center and there, the information

received through the audio device will be detailed in order to capture even more the interest for the functions of the forests, the vegetation, fauna and their overwhelmingly role in our existence and the entire planet.





a b.

Figure 1. Pedagogical Forest (Original)

# 4. Conclusions

The pedagogical forest will be a source of research, knowledge and science development, means of education, culture and human civilization, a factor of conservation of the landscape and the ecological and biological diversity [3].

More, this project target the students, who will have a space where they will be able to exercise the acquired knowledge during their years of study; there will be no more problems regarding the locations where the students need to achieve their teaching practice and the one specific to their profile.

The teachers will have a vision of the final results of the students and they will be able to evaluate and self-evaluate more easily.

The field is developing and the ideas that stand at the base of this project are not promoted in our country and because of this we believe that this center will be a point of interest for all categories of people.

# References

- [1] Barton J., J. Pretty, 2010, What is the best does of nature and green exercise for improving mental health? A multi-study analysis. Environmental Science & Technology, 44, 3947-3955. doi:10.1021/es903183r
- [2] Butean A., 2008, The changes in Education, 15-20,

Master of Science, University Vasile Goldis, Baia Mare.

- [3] Davy A. 2012, Forest schools. Resurgence & Ecologist, 275, 26-27.
- [4] Ilea M. 2011, Business management in forestry, Publisher Academic Pres Cluj-Napoca.

<sup>&</sup>quot;This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited."