

## Commission report

# LASPEH “Low Adriatic SPECies and Habitat”

LASPEH 162-T-3 Service for the realization of concrete actions in National park Lovćen in Montenegro:

- Preparation of the land for planting *Pinus heldreichii*;
- Removal of some not autochthonous species (*Pinus nigra*);
- Revitalisation of habitat

**Concrete actions in National park Lovćen in Montenegro will be realised in three phases:**

1. Revitalization of habitat;
  - 1.1. Marking area boundaries (vector data and secondary marking)
  - 1.2. Elimination of the causes of erosion in the habitat
2. Preparation of the land for planting *Pinus heldreichii*;
  - 2.1. Installation of retaining walls
  - 2.2. Application of land suitable for planting
  - 2.3. Removal of other potential obstacles
3. Removal of some not autochthonous species (*Pinus nigra*);
  - 3.1. Cut down trees of *Pinus nigra*
  - 3.2. Defining the assortment
  - 3.3. Anti-fire stocks
  - 3.4. Establishing forest order

Project of partner	PE National Parks of Montenegro
Name of event:	Establishment of a commission for supervision of works execution
Date:	24.07.2020.
Venue:	PE National Parks of Montenegro
Description of event:	In order to monitor the work process, a commission with 5 members is formed: two experts in the field of forestry, one legal expert, one expert in the field of environmental protection, and the secretary of the commission.
Target group:	Employees of the National Parks of Montenegro

Project of partner	PE National Parks of Montenegro
Name of event:	Commission report
Date:	By end of duration of Contract
Venue:	/
Description of event:	The Commission is obliged to deliver 4 reports: 1 initial report, 1 medium-term reports and final report.

a) Revitalization of habitat	
Project of partner	PE National Parks of Montenegro
Name of event:	Marking area boundaries (vector data and secondary marking)
Date:	04.08.2020
Venue:	PE National Parks of Montenegro
Description of event:	<ol style="list-style-type: none"> <li>1. Field data collection – 309 trees of <i>Pinus heldreichii</i> were detected in this habitat. 10 of them are severely damaged by pieces of crumbling rocks. 9 were poorly damaged or diseased.</li> <li>2. Creating a database from the field – a database was formed using data from the field.</li> <li>3. Developments of vector data from the field – no conditions for gathering vector data have been met.</li> <li>4. Defining maps with clearly defined boundaries of the <i>Pinus heldreichii</i> reserve – initial version of a map has been made; making a final, definite version of the map is in progress.</li> <li>5. Marking areas with secondary markings – this activity is partially finished. Between 10 and 20 percent of the habitat is marked with secondary markings.</li> <li>6. In collecting data in the field, it is necessary to detect the causes of erosion – three erosion causes have been detected, while other causes are still being searched for. Causes detected are following: <ol style="list-style-type: none"> <li>a. lack of green cover – grass and other low vegetation prevents stiffening of the ground</li> <li>b. soil liquefaction - soil substantially loses stiffness and strength</li> </ol> </li> </ol>

	<p>c. already established water sapping flows</p> <p>Habitat is located between the following three indicated coordinates:  <b>A:</b> 42°23'50.9"N 18°50'12.8"E  <b>B:</b> 42°23'53.4"N 18°50'21.3"E  <b>C:</b> 42°23'49.0"N 18°50'21.0"E</p> <p>The area occupied by the habitat is about 8 ha.</p>
<p>Target group:</p>	<p>Employees of the National Parks of Montenegro</p>
	

Project of partner	PE National Parks of Montenegro
Name of event:	Elimination of the causes of erosion in the habitat
Date:	05.08.2020
Venue:	PE National Parks of Montenegro
Description of event:	Log anchoring has been done in order to prevent further erosion. Logs are wedged in order to hold and prevent soil liquefaction.
Target group:	PE National Parks of Montenegro employees



<b>b) Preparation of the land for planting <i>Pinus heldreichii</i></b>	
Project of partner	PE National Parks of Montenegro
Name of event:	Installation of retaining walls
Date:	32 days from signing of contract
Venue:	PE National Parks of Montenegro
Description of event:	The required material for this activity is yet to be acquired.
Target group:	PE National Parks of Montenegro employees

Project of partner	PE National Parks of Montenegro
Name of event:	Application of land suitable for planting
Date:	40 days from signing of contract
Venue:	PE National Parks of Montenegro
Description of event:	The required material for this activity is yet to be acquired.
Target group:	PE National Parks of Montenegro employees

Project of partner	PE National Parks of Montenegro
Name of event:	Removal of other potential obstacles
Date:	By end of duration of Contract
Venue:	PE National Parks of Montenegro
Description of event:	Limestone soil has been removed. Due to chemical structure that is high in calcium carbonate (such is found in chalk), limestone easily reacts with raindrops. Limestone dissolves and washes away with rain, creating a layer of highly erosive soil.
Target group:	PE National Parks of Montenegro employees



<b>c) Removal of some non-autochthonous species (<i>Pinus nigra</i>)</b>	
Project of partner	PE National Parks of Montenegro
Name of event:	Cut down trees of <i>Pinus nigra</i>
Date:	By end of duration of Contract
Venue:	PE National Parks of Montenegro
Description of event:	Habitat-threatening trees have already been marked. This activity has been partially completed. Around 30% of non-autochthonous species have been removed. This activity is being implemented due to difficulties in development of <i>Pinus heldreichii</i> that arise from the presence of <i>Pinus nigra</i> .
Target group:	PE National Parks of Montenegro employees
	

Project of partner	PE National Parks of Montenegro
Name of event:	Defining the assortment
Date:	By end of duration of Contract
Venue:	PE National Parks of Montenegro
Description of event:	Assortment counting 20 logs has been defined. The assortment is split in 4 different groups: <ul style="list-style-type: none"> <li>A. &lt;1m (6 units/logs)</li> <li>B. 1-3m (3 units/logs)</li> <li>C. 3-5m (1 unit/log)</li> <li>D. &gt;5m (10 units/logs)</li> </ul>
Target group:	PE National Parks of Montenegro employees

Project of partner	PE National Parks of Montenegro
Name of event:	Anti-fire stocks
Date:	By end of duration of Contract
Venue:	PE National Parks of Montenegro
Description of event:	Anti-fire stocks have been completely formed. Water supplies have been distributed on the surface of the NP to prevent fire spread in emergency situations.
Target group:	PE National Parks of Montenegro employees



Project of partner	PE National Parks of Montenegro
Name of event:	Establishing forest order
Date:	By end of duration of Contract
Venue:	PE National Parks of Montenegro
Description of event:	Forest order has been partially established. The area where <i>Pinus nigra</i> trees have been removed is completely established, whereas areas where non-autochthonous species lack the fundamental condition for the activity to be completed. Anti-fire stocks have been defined, and making the assortment is still in progress.
Target group:	PE National Parks of Montenegro employees

Location of all *Pinus heldreichii* in the habitat of NP “Lovćen”.

