



# **After-LIFE Conservation Plan**

(Action F.5.)

Project

## **“Restoration of Biological Diversity in Military Training Area and *Natura 2000* Site “Adazi””**

**LIFE ADAZI**

**LIFE06 NAT/LV/000110**

**Riga  
2009**

## 1. History

Territory of *Natura 2000* site Adazi has been used for military training purposes almost for 100 years. The continuous disturbance and intensive military training has transformed the area and created an outstanding landscape. The area was a restricted (secret) zone and closed for visitors for many years. When Soviet army left, the area became available for nature conservationists who found rare species and habitats there. Along with the pleasing discoveries they also concluded that the natural succession would soon cause disappearance of most of these nature values from the area if the military training would be stopped. A status of *Natura 2000* site was given to the area in 2004 and management activities were planned. The *Natura 2000* site Adazi is little more than 6000 ha large and contains vast areas of disturbance dependant habitats – large open heath habitats (habitat 4030), complexes of inland dunes and grasslands (habitat 2330). There are also habitats in the area whose existence depend mostly on non-intervention. Those are raised bogs (habitats 7110 and 7120), wet forests (habitats 91D0, 91E0 and 9080) and an oligotrophic lake (habitat 3130). These habitats are situated in periphery of the area and in river valleys crossing the site. These places were inaccessible for any civilian visitors or economic interests while the Soviet army was operating in the territory. Many of the habitats found in the area are now rare and/or protected in Latvia and Europe. And they are inhabited by endangered and protected species of plants and animals.

Since the intensity of military training in the area has decreased during last 20 years the area is suffering from overgrowing, pollution caused by unregulated visitors and lack of scarification and burning.

A crucial need of management of the area was the reason why a LIFE-Nature project application was prepared and submitted. It was approved in 2006. During the LIFE-Nature project “Restoration of biological diversity in military training area and *Natura 2000* site “Adazi”” (from now on – Project) numerous actions were carried out with an aim to arrange administration of the site, restore habitats, prevent overgrowing and other causes of disappearance of habitats and assure future management of the site.

Detailed research of the area was carried out during hydrological study and development of management plan of the site. Based on the results of this research the management plan for next 10 years was prepared and proposal for monitoring of the hydrological regime of the area given. The gained information was also used for development of a special monitoring programme for the area. It is foreseen that regular monitoring of nature values of the site will be carried out by National Armed Forces. In addition to that a special training programme on nature protection issues was developed for military personnel. It contains basic information on nature values found in the Project site and explains how species and habitats can benefit during everyday training of military personnel. One thousand soldiers have already received the training and more will be trained in future.

Large scale restoration was carried out during the Project. More than 900 ha of heath habitats, 40 ha of meadows and grasslands and more than 300 ha of mire habitats were restored by removal of trees and bushes, mowing and even controlled burning (heath habitats). Bushes, fallen trees, reeds, turf layer, campfire remains and garbage were removed and wooden garbage containers were replaced along oligotrophic Lake Mazuika. Garbage containers were replaced and bushes and campfire remains were removed also along mezotrophic Lake Lieluika.

Several informative and educational actions were carried out, too. Project website was created in 2007 and will be maintained at least until 2015. Several types of brochures have been issued and 30 information and educational boards have been set up in the Project site. Three open door events, several experience exchange seminars, three study visits abroad and two conferences were organized within the framework of the Project.

As a result of the Project a detailed research and management planning has been done for the site, approximately 1300 ha of protected habitats have been restored and environmental awareness of military personnel and local society has been raised.

## **2. Current situation**

Knowledge about species and habitats in *Natura 2000* site “Adazi” and their condition has improved considerably during the Project. It provides very good basis for planning of use and management of the Project site in future. Knowledge and understanding of importance of nature protection has spread also amongst military personnel because one of the partners of the Project was National Armed Forces. Military personnel responsible for planning of military training in the Project site are taking into consideration instructions of nature experts regarding where and when particular military training activities are preferable or not. Beneficiary of the Project – State Agency for Defence Properties (after reorganization in December 30, 2009 – State Centre for Defence Military Sites and Procurement – SCDMSP) – and partner National Armed Forces strongly rely on knowledge gained during the Project when planning the future management of the area. For example, it is planned to continue removal of overgrowing in heath habitats, decrease uncontrolled visiting of the oligotrophic Lake Mazuika and allow burning of heath habitats when it has started during military training (in places where fire is in enclosure of existing natural barriers – roads, rivers, ditches). It is planned to devote significant amount of financing in budget of SCDMSP for nature protection and management in the area in coming years.

The Project area is mainly covered by open habitats like heath, inland dunes, grasslands and mires. There still are large areas where sufficient management is needed. Besides that the maintenance of restored areas is needed. It could partly be done by organizing an intensive military training there. But, unfortunately at present, numbers of military personnel and heavy equipment available for National Armed Forces of Latvia are not sufficient enough for providing regular and intensive disturbance and maintenance of all of the open habitats in the area.

## **3. Problems that remain**

There are still comparatively large areas of habitats where removal of overgrowing and other restoration actions would be needed. Continuous maintenance of restored habitats is needed.

The oligotrophic Lake Mazuika is still a very popular destination for unregulated flow of civilians. A lot of nature protection regulations are violated there. National Armed Forces are organising patrolling around the lakes but they do not have the needed resources and authorization to fully restrict the access to the lake.

During the Project a restoration of mire habitats has been carried out – overgrowing caused by negative influence of former melioration has been removed. The restored territories of the mire habitats are now suitable for species inhabiting open areas and intensity of evaporation has decreased. But that does not prevent the loss of water caused by the functioning melioration system. The Project did not include restoration of mire habitats by removal of melioration

systems. Experience of other nature restoration projects in Europe proves that the most effective method for restoration of degraded mire habitats is elimination of melioration system or building of dams to stop its functioning. It would be needed to build dams on melioration systems in Rampa bog and Dzerve bog in *Natura 2000* site Adazi in future.

Controlled burning is the most effective, natural and economic method for restoration of heath habitats. It is suggested and even accepted to include controlled burning in national legislation as habitat management method, but the regulations are still in process of approval and that could delay using of controlled burning in the Project area in spring 2010.

But despite the problems mentioned above the overall situation in the area should be evaluated as good. Significant improvements have been reached during the Project – large areas of protected habitats restored, good planning system initiated and awareness of importance of nature protection in the site highly increased. Functional system of management and protection of the site has been launched.

## SWOT analysis:

### Strengths

- Unique status of the area – *Natura 2000* site and military training area;
- A detailed management plan has been developed for the territory for the next 10 years;
- Very good knowledge about the nature values in the area gathered during the Project;
- Needs of military training in the area are coherent with nature protection needs – both need open areas and nature values benefit from disturbance caused by military training;
- The area is used by Defence sector therefore at least the basic management is also ensured;
- 3<sup>rd</sup> Regional Logistics Centre – unit of National Armed Forces responsible for management of the area – has a positive attitude to nature protection;
- SCDMSP has an employee who is working particularly with issues of nature protection in *Natura 2000* site Adazi.

### Opportunities

- Intensification of military training in the area assuring the entire disturbance that is needed to prevent overgrowing of habitats.
- Raising of an additional financing and expertise through cooperation with Ministry for the Environment of Latvia, Nature Protection Board, local municipalities, Latvian Fund for Nature, Latvian Ornithological Society etc.
- Improvements of legislation announcing controlled burning as a legal management method for habitats on forest land in Latvia.
- Using of nature protection actions in *Natura 2000* site Adazi as positive PR tool for Ministry of Defence, thus ensuring continuity of nature management actions in the area.

### Weaknesses

- Intensity of the military training in the area is not high enough to ensure the needed level of disturbance and regular management actions are needed to compensate it.
- Authorities of Defence sector consider nature protection to be a low priority.
- Military personnel lack authorization to fine or detain citizens who violate nature and environment protection regulations in the area and enter without permission.
- Defence sector has a complex administration system and initiation of any changes or innovations require a lot of effort and time.

### Threats

- Building of a multifunctional transport corridor across the area (project of improving of “Via Baltica”);
- Decreasing of the intensity of military training;
- Elimination of Environmental Department of SCDMSP and/or position of Environmental officer in 3<sup>rd</sup> RLC;
- Increase of numbers of illegal visitors in the area;
- Consequences of the financial crisis – decrease of the available financing and level of priority of the nature protection in the area;
- Initiation of logging in forests growing in the area.

#### **4. Future requirements**

The area requires constant nature management (most of the habitats are depending on human activities and would overgrow soon if left untouched). Therefore financing for management activities is needed every year and will be provided by SCDMSP. Environmental Department of SCDMSP and Environmental officer of 3<sup>rd</sup> RLC of NAF will do the planning, set priorities and supervise the use of the financing. The Project assistant remains in permanent position in the Environmental Department of SCDMSP and will be able to use the knowledge acquired during the implementation of the Project. She has a very good knowledge about the Project area. In cases when more specific expertise would be needed an external expert could be hired.

Intensity of military training in the area is not high enough to ensure the needed disturbance for the habitats in the whole area and most likely it will not change in coming years. Therefore the existing military activities should be used for maintaining the most valuable and vital habitats – training of sufficient intensity should be concentrated in places where it would provide the needed disturbance for maintaining the habitats without any additional management. The rest of the area should be maintained as widely as it is possible with the available financing. The planning of military training is responsibility of NAF. The personnel directly responsible for this duty have received all of the needed information and are already taking into consideration nature protection interests when planning the training activities.

One of the threats for nature protection in the Project site in future is decline of support of the Defence sector. Financing for the Defence sector in 2009 and 2010 has decreased significantly because of the financial crisis in the country. In situation when financing is needed for the direct duties of NAF and MoD it is more difficult to justify the need of nature protection activities in the military training area. Therefore environmental specialists of SCDMSP try to convince authorities of the Defence sector that nature protection should not be given up because it could be used for positive PR and attraction of more financing.

Awareness of importance of nature protection has increased amongst personnel of NAF during the Project. Military personnel are following regulations and avoiding harming of environment and nature. But military personnel are not the only persons who are entering the area. There are a lot of illegal visitors in the area (especially during summer). There has been established an effective patrolling system and military personnel are controlling the situation in the area as much as it is possible with available resources (human resources, available financing for fuel). Unfortunately, military personnel do not have authorization to fine civilians. Even if patrolling system is functioning very well patrollers cannot solve the situation themselves if aggressive trespassers are caught. In those cases local police or military police have to be drawn in. It makes the process time consuming and complicated. It would be needed in future to authorise the patrollers to fine trespassers. It could be reached by giving the patrollers a brief training and status of environmental inspectors.

During the implementation of the Project it was experienced that administrative system of defence sector in Latvia is complicated and any activity within it, especially if it requires inter-institutional cooperation, takes a lot of time. Effective nature management requires ability to react to new information, review planned actions and initiate new ones. We cannot expect significant changes in structure and system of operation of the Defence sector in close future. It has to be taken into consideration when planning any future management of the Project area – any practical activities will require more agreements and take more time than it would be for non-governmental institutions or nature protection institutions. In this situation very detailed and timely planning is needed.

There are several threats for management of the *Natura 2000* site Adazi in coming years. We cannot be sure of future of Environmental Department of SCDMSP and position of Environmental Officer of 3<sup>rd</sup> RLC. In worst scenario the consequences of the crisis can cause an elimination of these structures. That would dramatically impact the nature protection in the area because planning and supervision of the nature protection activities in the area would stop and financial resources would not be provided any more. The basic supervision of the Project area and processes in it will be assured as long as Defence sector will have any structures responsible for protection of environment and nature. Any plans of construction works in the area will be carefully reviewed, any changes of territorial planning will be carefully supervised and it will be constantly reminded of importance of nature protection in the area.

## **5. Responsibilities**

SCDMSP is responsible for management of properties of Ministry of Defence of Latvia. This institution is taking care of many management aspects of the military objects and protection of environment and nature is one of them. SCDMSP has a special structure – Environmental Department – for dealing with all environment and nature issues, including implementation of Environmental Management System (EMS). It is planned that the Environmental Department will act as manager of the area and will take care of all nature protection issues in the area.

NAF has an Environmental Officer situated in 3<sup>rd</sup> RLC in Kadaga (a couple of kilometres from the Project site). The Environmental Officer instructs military personnel on particular nature protection issues and can participate in the planning process of the training and supports implementation of EMS in structures of NAF.

Nature Protection Board has a regional administration covering Northern Vidzeme. It includes also *Natura 2000* site Adazi. The institution is an authority of importance of national level supervising implementation of Latvian and European nature protection regulations in protected areas. The team of NPB operating in Northern Vidzeme regional structure has a good experience regarding preparation and implementation of various projects and drawing of external financing. SCDMSP could work in cooperation with NPB and use their expertise for initiation of new projects in the area.

## **6. Funding**

The main funding for the management of the Project site in future will be provided by SCDMSP and managed by Environmental Department. The planned financing provided by SCDMSP for nature management in *Natura 2000* Adazi in 2010 is approximately 47 000 EUR. It is foreseen to increase the amount of financing in coming years.

NAF is partly providing human resources, transport and GIS for management of the area. Despite the fact they are not investing financial resources in management activities the importance of involvement of NAF is very high. Often the available human resources is the key factor for successful implementation of particular activities – for example, controlled burning, cleaning up of unexploded ammunition, patrolling etc. If the actual financial input of NAF would be calculated every year it would reach several tens of thousands.

Nature Protection Board is offering their expertise regarding getting of needed financing for different project activities.

Ministry of Defence has supported nature research and protection projects in *Natura 2000* site Adazi before and it could be continued in future when financial situation in Latvia will improve.

## 7. Proposed actions

No.	Activity	Priority and period of implementation	Source of financing	Responsible for implementation	Needed financing
<b>1</b>	<b>Administrative and managerial matters</b>				
1.1.	Marking of borders of <i>Natura 2000</i> site Adazi and strict nature reserve zones in field (according to national legislation)	I, 2009–2011	Local municipality, SCDMSP, NPB	SCDMSP, NAF in cooperation with local municipalities	1 frontier mark with sign would cost approximately EUR 70–85
1.2.	Creation of fire safety zone around open habitats in military training area	II, 2010.	EU financing in Latvia	NAF, SCDMSP	13 000 EUR
1.3.	Building of fence (barrier for people, not for animals) around the Military training area	III, 2008.–2018.	NAF, SCDMSP	SCDMSP	14 EUR per 1 m
1.4.	Removal of waste disposed in the area	I, every year if needed	NAF, SCDMSP local municipality	NAF, SCDMSP	Not needed
1.5.	Cleaning up from unexploded ammunition	I, every year	NAF	NAF	Not defined
1.6.	Restriction of recreation activities at Lake Mazuika	I, 2010	Not needed	Ministry of Defence	Not needed
1.7.	Building of an additional fencing around Lake Mazuika (barrier for people, not for animals)	I, 2011	SCDMSP	SCDMSP	42 500 EUR
	Signing of agreements with third parties regarding use of the <i>Natura 2000</i> site Adazi	II, whenever needed	Not needed	NAF, MoD	Not needed
<b>2</b>	<b>Restoration, protection and management of protected species and habitats</b>				
2.1.	Securing of non-intervention in natural forest habitats (876 ha)	I, every year	Not needed	NAF, SCDMSP	Not needed
2.2.	Maintenance of grassland habitats 40 ha	I, every year if needed	SCDMSP	SCDMSP	140-170 EUR per ha
2.3	Restoration of <i>Fennoscandian wooded meadows</i> 0.3 ha	I, 2010-2011	SCDMSP	SCDMSP	Not needed
2.4.	Cutting of trees and bushes along Lake Mazuika	I, 2010, and every year	SCDMSP	SCDMSP, NAF	285-350 EUR per ha
2.5	Cutting of trees and bushes along Lake	II, 2010 and every year	SCDMSP	SCDMSP, NAF	285-350 EUR per ha

	<b>Lieluika</b>				
<b>2.6</b>	<b>Mowing of reed along Lake Mazuika</b>	II, 2012 - 2015	SCDMSP	SCDMSP	285-350 EUR per ha
<b>2.7</b>	<b>Building of water level regulation culverts in melioration system in Dzerve and Rampa bogs</b>	I, 2010 - 2015	SCDMSP	SCDMSP	4250 – 7000 EUR each
	<b>Building of wooden dams in Rampa bog</b>	II, 2010-2015	SCDMSP	SCDMSP	Not defined, depends on number of dams and location
<b>2.8</b>	<b>Maintenance of heath habitats 900 ha</b>	I, 2010.–2018.	SCDMSP	SCDMSP	70-140 EUR per ha
<b>2.9</b>	<b>Restoration of heath and inland dunes by removal of overgrowing - 2000 ha</b>	II, 2010. – 2018.	SCDMSP	SCDMSP	140-215 EUR per ha
<b>2.10</b>	<b>Maintaining of restored mire habitats</b>	I, 2010.–2018.	SCDMSP	SCDMSP	70-140 EUR per ha
<b>2.11</b>	<b>Restoration of mire habitats by removal of overgrowing</b>	II, 2010.–2018.	SCDMSP	SCDMSP	140-215 EUR per ha
<b>2.12.</b>	<b>Patrolling and prevention of unregulated visitor flow</b>	II, every year	NAF	NAF, SCDMSP	Not needed
<b>3</b>	<b>Educational and informative actions</b>				
<b>3.1.</b>	<b>Organising of open door events every year</b>	I, every year	SCDMSP, NAF, Ministry of Defence	SCDMSP	Not defined, depends on needs
<b>3.2.</b>	<b>Maintenance of information boards and educational signs set up during the Project</b>	I, whenever needed	NAF	NAF	Not defined, depends on needs
<b>3.3.</b>	<b>Continuation of Project action A.6 – training of military personnel on nature protection issues</b>	every year starting from 2010	NAF	NAF	Not needed (or up to 50 EUR for each lecture)
<b>4</b>	<b>Monitoring</b>				
<b>4.1.</b>	<b>Monitoring of water quality of Lake Mazuika</b>	II, every year, starting from 2010	SCDMSP	SCDMSP	700 EUR per year
<b>4.2.</b>	<b>Monitoring of nature values in the area</b>	I, every year, starting from 2010	NAF	NAF, SCDMSP	Not defined
<b>4.3.</b>	<b>Monitoring of impacts of management activities</b>	I, every three years, starting from 2011	SCDMSP	SCDMSP	1400 – 2800 EUR per year