UPM Biodiversity program

UPM BUSINESS AND BIODIVERSITY PROJECTS 1997-2018

	PROJECT NAME	TARGET	DESCRIPTION	TIME	PARTNERS
1.	**Esker habitats**	To find solutions to restore esker habitats into more natural like conditions	Because of manmade fire prevention activities, eskers have not burnt actively. This has caused a situation where tree cover has closed and natural conditions, open and hot south facing slopes have become cold and shady. Due to this development, a major percentage of esker species have become threatened. This initiative consisted on several different projects to find solutions to treat esker habitats in a way that threatened species would benefit and become more common.	2004-2014	Finnish Environment Institute Metsähallitus
2.	**Valuable habitat inventory**	To find valuable habitats defined by Forest Act, forest certification and UPM from UPM owned forests	All UPM forests were inventoried by map and on-site to find and protect valuable habitats. Inventory was done by trained specialists on summer time. As a result, over 20 000 sites were identified and protected, like springs, brooks, unditched mires and groves.	1997-2002	
3.	**Fire habitats**	To increase amount of controlled fires and to find new ecoefficient ways of controlled fires to promote biodiversity of fire-dependent species.	Forest fires have been common in Finnish forests before fire preventing activities took place. Due to the history, part of species are dependent forest fires and they need burnt wood and soil in their lifecycle. Target was to increase the amount of silvicultural controlled fires and to find new ways, like burning of retention tree groups, to increase resource to fire dependent species.	2004- 2011	Ministry of Agriculture and Forestry Ministry of Environment via the METSO -project
4.	**Restoration of Boreal Forest and ForestCovered Mires, Metsälife**	To restore forests and mires into more natural conditions in protected areas to promote biodiversity	By restoration to create characteristics of a natural forest that are lacking or absent, such as dead and decaying wood, charred wood, deciduous trees, variation in the structure of the forest and natural hydrological conditions. Target was to speed up nature's processes to promote biodiversity.	2002-2007	EU LIFE Nature Fund Metsähallitus

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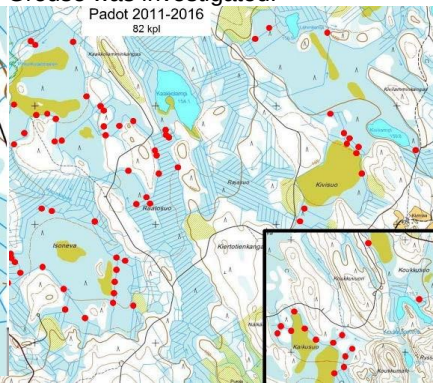
5.	**Peatland restoration**	To restore mire's hydrology into more natural conditions by blocking earlier made ditches and to promote habitats of Red Grouse (*Lagopus lagopus*)	Selected mires were identified to be low productive for forestry but having value for biodiversity and to Red Grouse. Plan how and where earlier made ditches shall be blocked and how was done and implemented. Also possible need for harvesting to create more open area for Red Grouse was investigated.  	2010- 2017	Keurusseudun luonnonystävät (Friends of nature in Keuruu area) Finnish Association for Nature Conservation's district in Central Finland
6.	**Siberian Jay**	To find solutions to promote habitats for Siberian Jay (*Perisoreus infaustus*) and to study needed conditions in breeding site and surrounding forests.	To investigate possible protection needs in breeding sites and what kind of forest activities are possible in surrounding forests in areal level.	2009-2011	Finnish Association for Nature Conservation, funding Ministry of Agriculture and Forestry and Ministry of Environment
7.	**Creat Crested Newt (*Triturus cristatus*)**	To promote habitats of EU-protected species Creat Crested Newt	To investigate possibilities to improve habitats of the species by harvesting in buffer zones and to improve old habitats by excavator. It was also tested, can new habitats be created by digging.	2010-2013	Center for the Economic Development, Transport and the

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					Environment, North-Carelia
8.	**Native hardwoods**	To increase the amount of rare broadleaf species to improve living conditions of species dependent on them	Project focuses on planting rare broadleaf species, like lime tree and oak, to add resources to species dependent on them. Project focuses on selecting right genotype to areas to-be-planted and actual planting of seedlings.	2004	
9.	**Dunlin (*Calidris alpina*)**	To treat habitats of Dunlin to promote their breeding site	Reaping of seashore areas where Dunlin breeds with local representatives of Birdlife in Yyteri area.	2006-2010	▪ Birdlife
10.	**White-Backed woodpecker (*Dendrocopos leucotos*)**	To promote actions for White-Backed Woodpecker, the most threatened forest bird in Finland	To collect knowledge on White-Backed Woodpecker and its habitat needs and to decrease prejudice towards the species by communicating new knowledge.	2013-2015	▪ WWF Finland ▪ Finnish Environment Institute ▪ Metsähallitus
11.	**Osprey (*Pandion haliaetus*) nests**	To build artificial nest for Osprey to promote successful nesting	Artificial nests are built for Osprey to promote breeding success. Nests are placed into UPM forests on suitable sites.	2006-	Osprey Foundation
12.	**Osprey (*Pandion haliaetus*) satellite monitoring**	To learn migration behavior and use of space in nesting sites	Satellite transmitter was attached to selected Ospreys. Transmitter sent GPS were the Osprey was moving to understand how Ospreys use space in nesting sites and while migrating.	2007-2012	Finnish Museum of Natural History
13.	**Three-toed woodpecker**	To study usage of space in nesting time in forest area	Radio transmitters were attached into Three-Toed-Woodpecker to find out how do they use forest area and deadwood resources in nesting time.	2005	Finnish Museum of Natural History

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14.	**Beatles in deadwood**	To study the importance of deadwood to beetle species and to understand what benefits retention trees can produce to beetle biodiversity	Beetle traps are attached to artificial snags in summer time. Beetles are collected and species are identified to understand can deadwood and retention trees promote beetle species biodiversity.	2004-	Independent researcher
15.	**Boreal Peatland -Life**	To protect and restore valuable peatlands	LIFE project focused on finding valuable peatlands in UPM owned land. The most valuable sites in their natural state were protected and earlier ditched areas' hydrology was restored to their natural condition to promote biodiversity in peatlands	2010-2014	Metsähallitus and Center for the Economic Development, transport and the Environment
16.	**METSO-programme**	To voluntarily protect valuable habitats	UPM promotes voluntary protection of valuable habitats. Habitats are protected in UPM owned forests and with private forest owners is discussed on the possibility to protect valuable habitats they own.	2007-	
17.	**Heritage forest programme**	To promote voluntary forest protection	To share knowledge on voluntary forest protection to private forest owners and to protect voluntarily selected sites in UPM forests	2005	WWF Finland
18.	**Bats in commercial forests**	To study how EU protected species Brand's bat use forest habitats in their daily life	Radio transmitters were attached to Brand's bats (*Myotis brandtii*) and their space usage in commercial forests was followed.	2008	Independent researcher
19.	**Light & Fire Life**	To promote biodiversity in hot and open areas by using harvesting and burning methods	EU Life project In Natura 2000 areas harvesting and burning methods are used to create sunny and hot habitats for threatened species needing hot sunlight. Habitats are, for example, esker slopes where trees shade sun needing vascular plants.	2015-	Metsähallitus

20.	**Osprey (*Pandion haliaetus*) nest camera**	To study Ospreys behavior in nesting time	Camera was set to film Ospreys nest to study nesting behavior of Osprey.	2015-	Osprey Foundation

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21.	**Parallel field testing of forest certification standards**	To understand how forest certification standards emphasizes sustainability aspects	Different forest certification standards were studied and tested on how they take into account economical, ecological and social aspects.	2004	DNV, WWF Finland
22.	**Decaying wood in commercial forests**	To inventory how much there is decaying wood in commercial forests	Inventory amount of decaying in wood in commercial forests in Kainuu and Hame region. Two separate forest estates were inventoried on site basis	2005	
23.	**Forest certification**	To promote sustainable use of forests	UPM offers FSC and PEFC forest certification to private forest owners. Since 2012 private forest owners have been able to certify their land to FSC and 2014 to PEFC via UPM group certificates. All UPM land is certified according to FSC, PEFC or both. Protection and restoration measures are approved and verified by 3rd party experts: http://fsc.force.com/servlet/servlet.FileDownload?file=00Pf300000p1JNbEAM	1998-	
24.	**Voluntary projects**	To promote living conditions of forest bird species	Living conditions of forest bird species are promoted by voluntary work. Local bird associations have selected sites and projects and gathered people to voluntary work days.	2011-	Birdlife Finland

25.	**Spatial information of osprey nests**	To promote living conditions of ospreys in commercial forests.	UPM made an agreement with Osprey Foundation and LUOMUS (Finnish Museum of Natural History) on providing spatial information of osprey nests to UPM. UPM uses the information to safeguard the nests in forestry operations. Information will be updated regularly.	2018-	Osprey Foundation, LUOMUS (Finnish Museum of Natural History)
26.	**Spatial information of nests of large diurnal birds of prey**	To promote living conditions of large diurnal birds of prey in commercial forests	UPM and PKLTY ry (Ornithological society of North Carelia) agreed on providing spatial information of nests of large diurnal birds of prey to UPM. Information covers UPM's own forests and some private owned forests in North Carelia. UPM uses the information to safeguard the nests in forestry operations. Artificial nests are also built to replace abandoned old nests. Information will be updated regularly.	2018-	Ornithological Society of North Carelia
27.	**Migrant fish project**	To support restoration of migrating fish stocks	UPM and Centre for the Economic Development, Transport and the Environment of Central Finland are removing fish migration barriers from streams in Central Finland.	2018-	Centre for the Economic Development, Transport and the Environment of Central Finland
28.	**Guidelines for forestry operations near ospreys nesting trees**	To promote living conditions of ospreys in commercial forests.	UPM and Osprey Foundation created in cooperation guidelines for forestry operations near ospreys nesting trees. Guidelines are deployed in to everyday use in UPM forestry operations. They are also published in UPM's web page to allow all interested parties to use them.	2017	Osprey Foundation

Threatened species occurrences on company owned forests (based on data of Finnish Environment Institute):

IUCN-category	Number
LC	3
NT	494
VU	226
EN	51
CR	7