

09.05.16 – Monday

15:00 -15:30 Arrival at the Warsaw Chopin Airport and departure to Białowieża – group departure by bus (19+1 persons).



21:00-22:00 - Evening excursion to meadows surrounding Białowieża –Wilczkowe Laki (amphibian habitats grazed by Bison, created by the LIFE 08 NAT/PL/000510 LIFE AQUILA project (2010-2014).

Output

Table 1. Observations on the specific location regarding species, management and others.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
European Tree Frog (<i>Hyla arborea</i>)	Meadow	Late mowing and also the ponds when dried out. Grazed by Bison and wild animals.	Many ponds, different size, resilient and suitable for different amphibian species. No fences around the ponds. Many calling males. Pairing. Calm and warm night. Most of them made under 100 m2 so they could get farm subsidies.	Important with big area, many ponds with different shape and depth. Can be OK to let grazing cattle visit the ponds if there are many ponds and not too many cattles. Visual and hearing, species recognition. Baseline habitat
Corn crake (<i>Crex crex</i>)	Meadow	Late mowing.		Several threatened species will be supported by the mangement.



Re-creating habitat complexity for semi-aquatic fauna

European bison (footprints in the ponds)	Meadow			Several threatened species will be supported by the mangement.
Wolf (footprints in the ponds)	Meadow			Several threatened species will be supported by the mangement.
Wild boar (footprints in the ponds)	Meadow			Makes open ground and new edges by the pond by it's activity
Different species	Meadow	Late mowing	Many people/groups involved	Important to cooperate with landowners, locals and different organisations to get success.



Listening to and looking for *Hyla arborea*. HC



Hyla arborea calling male in pond. HC



Sunrise over the restored meadows at Wilczkowie. HC



A shallow, moweable pond made some years ago in the restored meadow at Wilczkowie. HC

10.05.16 – Tuesday

3:45 – 8:00 Morning excursion to the forest glades in Bialowieza (Natura2000 site PLC200004) and Siemianowka Lake (IBA PL170).

Output

Table 2. Observations on the specific location regarding species, management and others.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
European bison	Meadow and forest.	Mowing	6 young males in a group. Foggy. Close to road and village (people). Population in the whole forest: 600.	Different species get favour of amphibian habitats. Big grazers of the meadows and ponds. Important to cooperate with local people to avoid damages. Management plans for both small and big animals (also to prevent damages on crops).



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<p>Different wetland and wet grassland birds. i.e black tern, whisk. Tern. Whitew. Tern, bittern, white stork, common swift, Penduline tit, corn crake, warblers, whooper, hoopoe.</p>	<p>Shallow lake with reed beds. Meadows.</p>			<p>Several wetland habitats in the same area indicates high biodiversity. Visual recognition. Baseline habitat.</p>
<p>Moose</p>	<p>Meadow</p>			<p>Visual recognition.</p>



LIFE14 NAT/SE/000201 SEMIAQUATICLIFE

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European bison *Bison bonasus* in the dawn. HC



Trademark for nature (both Bison and Bisongrass *Hierochloë odorata*). HC



The man made lake Siemianowka. HC



Example of wetland species. Penduline tit *Remiz pendulinus*, lake Siemianowka. HC



Meadows close to lake Siemanowka. HC



11:30 – 13:30 Excursion to Narewka valley and Bialowieza glade

Output

Table 3.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Lesser spotted eagle	Meadows, river restoration and ponds for amphibians	Bird tower Mowing and grazing. Hay not used. Often burnt on the meadow.		Important to have a place where people can see, experience and get information. Interaction between different species and habitats in the same project
	Meadow, restored river	Mowing and grazing. Hay not used. Often burnt on the meadow.	Multiple species action. Restoration re-meandering the river. 5 spotted eagles seen in the air. 5 breeding pairs around Bialowieza village. 40 pairs in the forest.	Large very wet natural floodplains are important for the amphibians with many natural small "ponds". With management there is an increase in amphibians. Important with dialog with stakeholders when doing restoration. Many locals, groups and authorities cooperate.



Restored wetlands where the old water way still remained and bird watch tower.



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14:30 – 18:30 Excursion to the strict reserve of the Białowieża National Park (the last remnants of untouched forest in the North European lowland)

Output

Table 4.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Several species of woodpeckers, Painted Bunting, collared flycatcher, Three-toed woodpecker, Redbreasted flycatcher, firecrest,	Deciduous forest with some spruce and few firs.	No management today.	Reminiscent from earlier use by man. Couldn't see any reproduction of oak and spruce.	Mostly forest habitat. High diversity, especially among birds but probably also among insects and fungi. The forest is dense and not very wet. There are some alder swamps. Very few amphibians were seen. Striking light woods with great variation. Many slender trees in relation to the open countryside. No beech due to the climate. Up to 60 % dead wood.
Bison and red deer			Not observed	Untouched forest since the ice age, but big animals grazing.
Wolf (markings)	Deciduous forest with some spruce and few firs.	No management today.		Baseline habitat, no interaction with people.



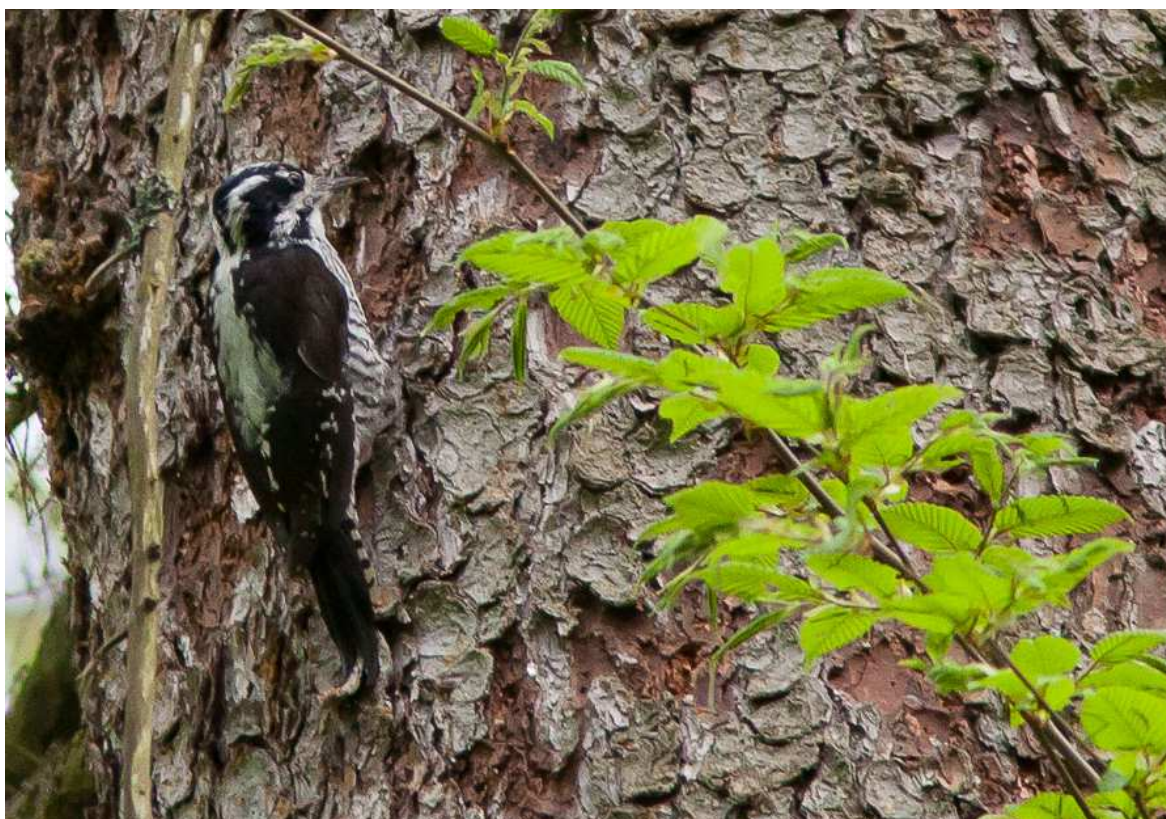
Forest with no management today. HC



Dense forest in Białowieża – first picture: wolf. Fourth picture: 40 years old as dead wood.



Middle-spotted woodpecker HC



Three-toed woodpecker HC



Re-creating habitat complexity for semi-aquatic fauna

22:00 - Optional walk to see Narewka River restoration site (LIFE AQUILA – project) near Carska Restaurant and night calling birds and amphibians.

Output

Table 5.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Emperor	Restaurant	Impact during several hundred years	Hunting area with natural or seminatural habitats in a big area and for many years	Sometimes important to find areas with long traditional use. The history of the place and its' surroundings makes it an tourist attraction and gives value to the site.



The important Emperor. The restaurant in the old railway station. HC



11.05.16 – Wednesday

04:00 – 06:00 Morning excursion to managed parts of the Bialowieza Forest (Natura2000 PLC200004) and nature reserve “Wysokie Bagno”

Output

Table 6.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Ants	Forest	Protection of anthills from wild boar by fencing		Detailed/specific protection of living sites
Black stork (Johan ☺), Pygmy Owl heard earlier, middlespotted woodpecker, collared flycatcher, wryneck, river warbler, white/backed woodpecker, black woodpecker	Forest			
Hyla arborea			Small ponds in open areas	



Anthill protected from wild boars. Ansjka and Narewka River. Beaver-cut trees on the river bank.

11:30 – 13:00 Visit in White Stork ‘Village’ in Tykocin at Nawrew River valley Natura2000 “Ostoja Narwianska” PLH200024 + seminatural, undrained and low fertilized meadows



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Table 7.

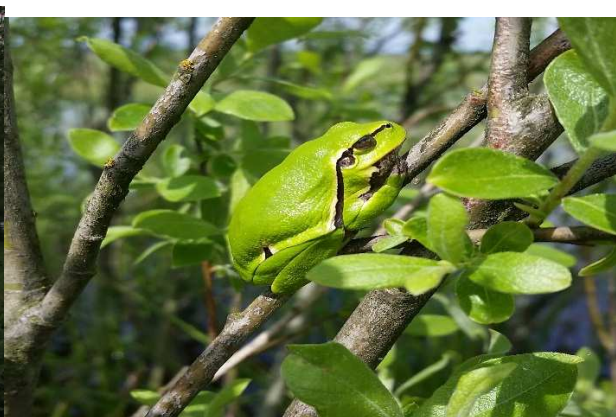
Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
White stork (<i>Ciconia ciconia</i>)	Village, farm near ponds	Building of nests in trees and on roofs	Many stork families gathered on one site. Facilities for groups of families, schools to make activities or rest.	Example of “ecosystem service” where inhabitants utilize the values of species to put themselves <i>on the map</i> and make money on tourism and facilities for recreation.
Fire bellied toad (<i>Bombina bombina</i>) and <i>Rana xx</i>	Ponds	?		Poland, at least its eastern parts is a heaven for frogs and frog eating bird.
Great reed warbler, turtle dove	Semi-natural grasslands			
	Semi-natural grasslands	Traditonal grazing	Seminatural undrained, low fertilized grasslands with newly made ponds.	Remaining due to poverty and a strong NGO buying the land.



Frog pond at the stork village with *Rana xx*. HC



Farm with stork village. Ansjä. Semi natural grassland with newly made ponds for amphibian species. HC



Pond with *Bombina bombina*. Also quite a few dragonfly species were found. *Hyla arborea* in willow-trees in semi natural grassland.



Re-creating habitat complexity for semi-aquatic fauna

15:00 – 18:00 Departure to Biebrza and excursion – presentation of the Meadow bird management at Mscichy (Natura2000 “Ostoja Biebrzanska” PLB200006) one of the sites managed during the LIFE05 NAT/PL/000101: Aquatic Warbler project - Conserving *Acrocephalus paludicola* in Poland and Germany (2005-2011). Meeting the project’s site manager Lukasz Mucha of the Polish Society for the Protection of Birds (OTOP), who presented reestablishment of hay mowing (scrub removal and moving regimes) and biomass use in the N2000 site.

Visiting Burzyn – a site with a view over the marshes and Biebrza river valley

Output

Table 8.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Fire bellied toad (<i>Bombina bombina</i>)	wet (flooded) meadows, (Natura 2000, 6410)	Mowing. Hay was cut in august, dried in the field, pressed, moved the roadside, collected in the winter when frost, transported to fabric and made to pellets. In the area there where over 40! Special machines on belts owned by private landowners. Cut down trees where used as a road for the moving machines.		The frogs benefitted of the restoration made for the aquatic warbler. The hay was used for making pellets thus making an important income of the hay (and a way to getting rid of it).
Frogs, Aquatic warbler, Great snipe, Cranes, great grey shrike		Restoring from bushes and high tussocks, now sustainable mowing with income from subsidies from EU environmental scheme and selling hay for pelleting and energy use.	“willow bush roads”	Facilitating development of new, and we hope, sustainable use of hay as an energy resource in big towns not far away. Problem to discuss biodiversity optimal water regime with private owners. Important to have fantasy and find solutions (as in this case “willow bush roads” through the soft and wet meadows. Also to agree on pragmatic solutions.
Moose	Meadow			Big grazers makes the habitat more natural



Wet restored meadow at Mscichy for Aquatic warbler. HC



Pelleted meadow hay used as energy resource and "Willow bush road" at Mscichy. HC



Moose, big browser in the wetlands at Mscichy HC



Presentation of ownership and management.



Re-creating habitat complexity for semi-aquatic fauna

12.05.16 – Thursday

9:00 – 13:30 Excursion – presentation of the LIFE05 NAT/PL/000101: Aquatic Warbler (2005-2011) in the Biebrza Marshes – sites: Brzostowo, Osowiec-Twierdza (Biebrzanski Nat Park HQ), Goniadz and a guided walk across the Biebrza Middle Basin – hay meadow management and peatbog birch forest. Meeting Piotr Marczakiewicz - site manager of the LIFE05 NAT/PL/000101 Aquatic Warbler project and senior conservation specialist at the Biebrza Nat Park.

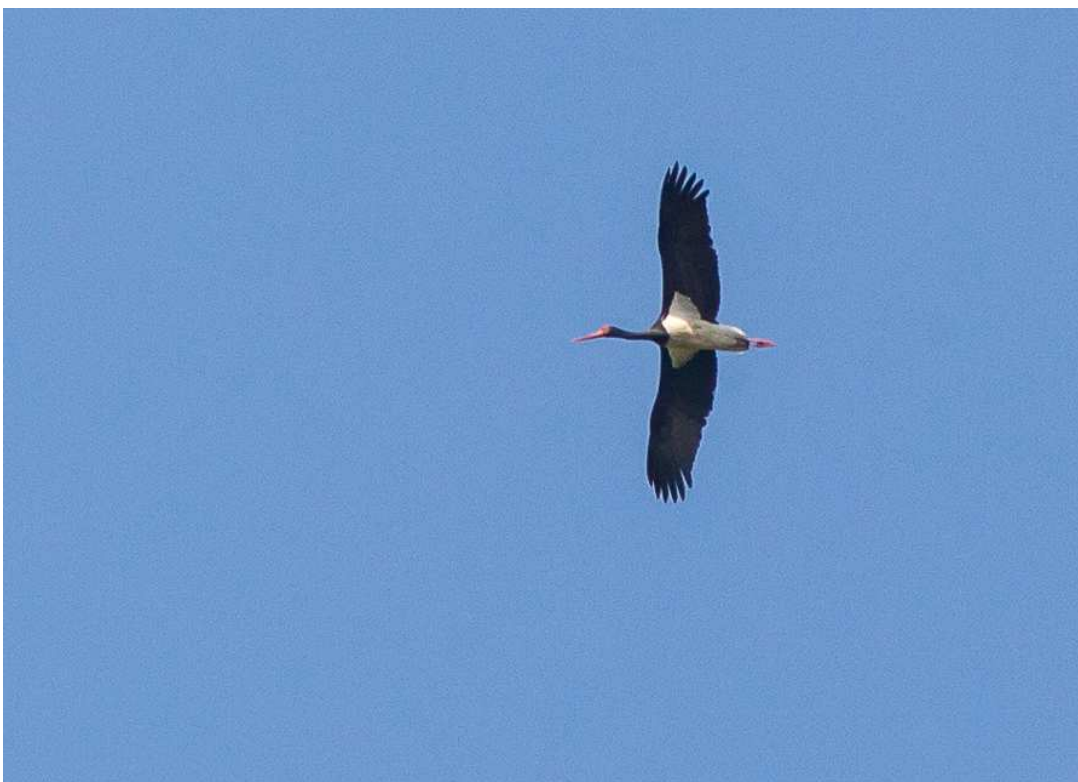
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Table 9.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Bombina bombina	Birch forest with "openings"	Beavers cutting trees	Openings (up to 100 ha) were made to benefit lesser-spotted eagle, black stork, eagle owl for eating-habitats	When enough frogs they even spread to habitats not optimal for breeding. Habitat only optimal for foraging.
White-backed woodpecker and golden oriole	Birch forest with "openings"			
Wild boar			Marks at the path	
Frogs, waderbirds, ducks, Black-tailed godwit, black stork, white-tailed eagle, ruff, great white egret, white-winged tern, whiskered tern, black tern (Brzostowo)	Grazed river shore meadow	Fluctuation of the water in the riverbassin made natural habitats for waders making management unnecessary	Bird watch tower and information signs	Disappearing seminatural biotope due to fewer and fewer farmers with cattle. Reflection: why do they not have meat producing farms with extensive grazing as in Sweden?



Grönfläckig padda *Bufo viridis* calling in the daylight in quite large number, Brzostowo. HC



Black stork, Brzostowo. HC.



Dying birch and old channels with amphibian in the wetlands in the middle basin. HC



Restored meadow on peat (?) ground in the middle basin. HC



Add

Breeding White-backed woodpecker in the middle basin. HC



Tree cut by beaver and spot with waterbirds, frogs and bird watch tower and information signs.



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14:30 – 17:30 Burzyn - Wizna Port- Terns and meadow birds; - 13,5 km kajak trip in the Biebrza and Narew valleys (Natura2000 sites: PLB200006, PLH200008)

Output

Table 10.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
	River		Intense private angling	Overall large intact floodplain like the one in Biebrza do not exist in southern Sweden anymore. Maybe they have been existed but are now cultivated.
Frogs (Bombina, bombina) and birds (Black terns, white-winged tern, whiskered tern, godwit, oriole.)	Ponds, shore meadows on sand, silt or peat along the river	Mowing, grazing. Fluctuation of water made natural habitats in the old meanders.	Still rather lots of old traditional landscape. Grazing and mowing decreasing.	The old landscape, with big areas of managed/used or newly managed/used wetlands together with the warm continental climate make good conditions for preserving and restoring wetland habitats for birds and amphibians. The amphibians in the floodplain have what we need in Denmark: Space og variation in the habitats
Diverse species composition	Different wetland habitats	Managed and not managed	Ecotourism	Income for locals, interest for nature conservation. Good for man and good for nature.
Beaver	Along the river			



We found lots of European spadefoot toads *Pelobates fuscus* (very rare and hard to see in Skåne, southern Sweden) and other frogs in the evening along the roads close to the B&B in Wizna village. HC





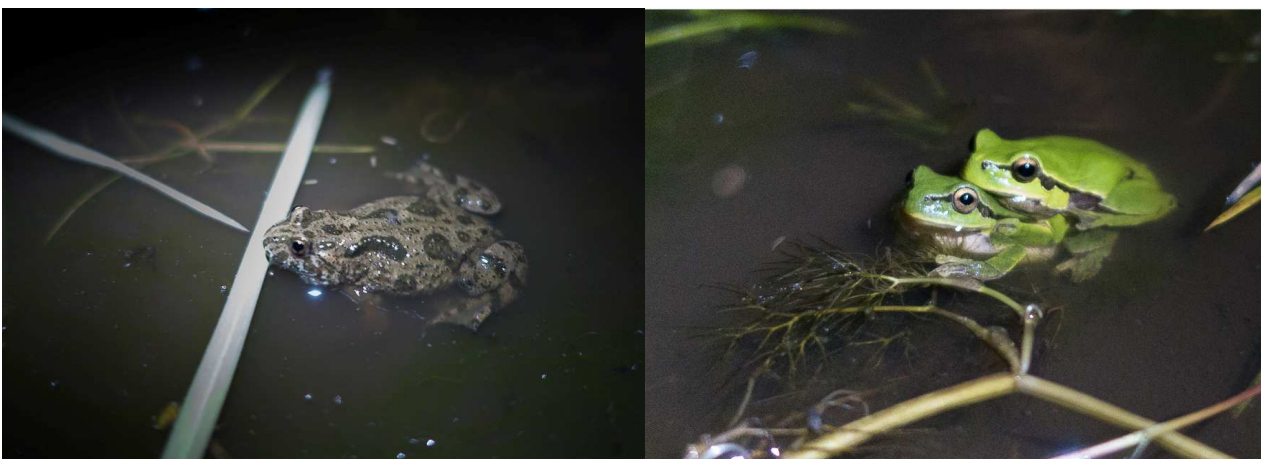
White stork. Important wetland ambassador and tourist magnet. B&B, Wizna. HC

20:00 Project site in the LIFE Aquatic Warbler- Bagno Ławki – Aquatic Warblers. Amphibians in Laskowiec – Brzeziny in the evening.

Output

Table 11.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Different frog/toad species	Flooded, grazed meadow. Wet road near B&B	Grazing	Big area with lots of newly (?) made ponds on different “micro altitude” and with different shape make the habitat resilient to various weather conditions in different years. On 300-400 meters we saw up to 40 pelobates sitting on the wet road.	Important to make large areas with lot of different types of ponds to make habitats for several species and restore the functionality of the ecosystem as a whole.
Aquatic warbler	Meadows	Most of the birds where sitting in reed/vegetati on up to 70-80 cm.	Stronghold for the population in the area. 1.600 males heard in the area. 25% of world population lived in Biebrza. View: 10 km to the Biebrza river. Mowed every second to sixth year. Long wooden path and lot of tourist (bird watchers)	



Fire bellied toad (*Bombina orientalis*) and *Hyla arborea* calling mating in vegetation diverse pond, Brzeziny. HC



“Special designed pond” with calamita and viridis! Pelobates and calamita.



Wooden path in habitat for aquatic warbler, who rules here!

20:30 – 22:00 Evening excursion by boats – observing beavers at Narew river (PLH200008).

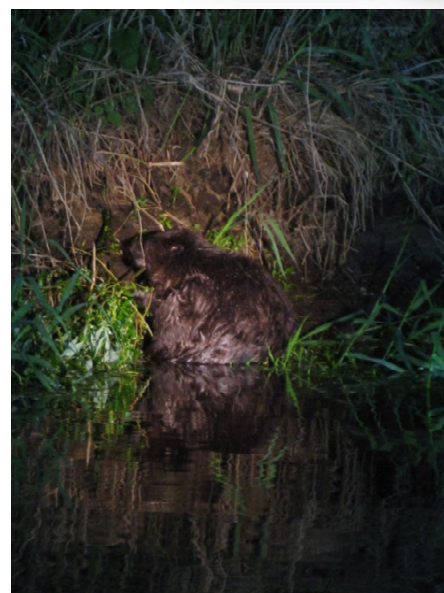
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Table 12.

Species	Nature type	Management	Specifics	Conclusions or relation to project site/method in SemiAquaticLIFE
Beaver	River		Beaver caves in the river bank	Ecosystem service who gives jobs to local inhabitants with B&B and beaver-safaries in the night. Wonder if there are any restrictions for tourist/private activities to protect the beavers?

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Ecotourism, important to get acceptance for nature conservation among locals and beaver by the river bank, B&B in Wizna. HC

13.05.16 – Friday

06:00 Departure to Warsaw (about 3 hr) and 09:45 Arrival at the Warsaw Chopin Airport

Departure to DK/SWE/GER

Fence to protect frogs and broad ecoducts along the new highway from Warsaw to Vilnius.