# Poland

## Ancient wildwood & the floodplains of Biebzra

## A Greentours Trip Report

18<sup>th</sup> to 25<sup>th</sup> September 2017 Led by Phil Benstead

Trip report compiled by Phil Benstead

#### Day 1 Monday 18th September arrival and journey to Bialowieza

We all met up at the airport having come via a number of routes, some experiencing delays. We located the minibus and then set off through the Warsaw rush-hour traffic. During our four-hour drive we also had to contend with very stormy weather delivering occasional heavy rain and plenty of roadworks but we negotiated all successfully. Leaving Warsaw behind we noted the gradual slide into rural north-eastern Poland and spotted the occasional common wayside bird. It being so late stopping en route was not really an option this year but we enjoyed a driveby adult white-tailed eagle and when it got dark we started to see a few mammals including a fine male red deer and a surprise racoon dog!

A short pitstop was called for though en route and soon after we were searching out the hotel situated in a village nestled in a clearing in the middle of the forest. We were straight into dinner and then sorted out our rooms and finally we could relax. We looked forward to dawn and our first foray into the Bialowieza area.

## Day 2 Tuesday 19th September Bialowieza

Half the group made it out the door at 0430 for the dawn bison patrol. Mateusz our guide arrived punctually and proved to be both great company and knowledgeable and he delivered the mammals we ordered. Bumping along the roads and tracks to get into dawn feeding areas for our big target – the bison, produced new mammals straight away, with a young red fox and our only European hare crossing in front of us. Checking the meadows along the forest edge near Lesna produced our first four bison, all males of different ages! Superb! We moved on to a nearby site and connected with a staggering herd of 70 (mostly females and youngster) bison. Unfortunately they were being hunted by photographers and we had to settle for scope views before they eventually got pushed back into the forest for the

day. We checked yet another nearby hotspot and were rewarded with another dozen. Simply amazing.

Driving back along the woodland tracks we occasionally dodged fallen trees and branches knocked down by yesterday's storm and slowing for a bridge allowed Cecilia to spot a fine male elk that was photographed at length. Finally back at the hotel, we said our thanks to Mateusz (who had to go to work) and headed for a well-earned breakfast. Nearly every building in the village seemed to have a singing black redstart and overhead our only lesser spotted eagle soared briefly.

After breakfast we drove from the hotel and did an easy circuit around the village to get the lay of the land before heading to the Zebra Zubra boardwalk. Unfortunately our arrival was perfectly co-ordinated with that of a large and boisterous school-group... This may have affected results... The site did offer the chance to look at a magnificient example of alder carr woodland though. If you are familiar with this habitat from the UK, you will not fail to be amazed by the towering height of the alders here. This carr woodland also included good amounts of ash and spruce and is typified by large amounts of dead wood. Fungi were much in evidence and included the scarce alder bracket (*Inonotus radiatus*), panthercap (*Amanita pantherina*) and the common honey fungus (*Armillaria mellea*). Birds included a few encounters (mostly auditory) with lesser, middle and greater spotted woodpeckers. Nearer the small wildlife park the land rose slightly and the drier soil supported an oak-limehornbeam association. Interesting stuff. Phil headed back to drive Elizabeth round by road whilst the rest of the team cracked on to be met at the park for a packed lunch in the sun.

After lunch we wandered about the wildlife park (Phil and Elizabeth in a cycle rickshaw...), adding several red squirrels to the mammal list but failing to find any woodpeckers. We commiserated with the captive wild cats, marvelled at the apparent contentment of the wolf and lynx and took sneaky pictures of the bison and huge male red deer (trying artfully to eliminate any trace of fencing or captivity).

Back in the village Cecilia kindly bought us an ice cream to celebrate a good day and we ended down by the river. Here we missed seeing a vocal kingfisher and checked the watchtower (rather quiet). Moving on we checked out the old Czarist railway station (now a restaurant) in the village and finally saw a lesser spotted woodpecker (albeit in flight). So ended our first full day.

## Day 3 Wednesday 20th September Bialowieza

Another 0430 start saw the bison-less half of the team (plus Cecilia again) raring to get out and have a crack at this fantastic animal. We arrived near the site in the dark and had to wait ten minutes for first light. On the way this morning we saw just a single wood mouse. When the light was good enough we trundled in and there was a nice mixed herd of 12 rather curious bison. This morning we were all alone in our quest for bison and so bumped down

the track until we were parked up right next to the herd. A very satisfactory encounter. On the way home we took a different route (legal this time) and were fortunate to bump into a party of eight wild boars that crossed the road individually about a kilometre down an arrow-straight forest track. Boars are hard to find this year as an outbreak of African swine fever in the region is being met by a severe cull of these endearing wild pigs.

After breakfast we headed out along a bumpy track to the Kosy Most area. This area of the forest is typified by a high density of Scots pine and spruce and we enjoyed our walk down the track towards the river. A flock of crested tit appeared briefly and we found bison tracks and wolf scat amongst the signs of other less exciting mammals. Thrilling stuff. There are only three wolf packs in the park, totalling circa 30 animals, so seeing any sign in such a vast area is good going indeed. The high watch-tower produced a brief glimpse of our first nutcracker (scarce this year) and also our first marsh harrier drifted south high overhead.

After a late lunch of pierogi back at the hotel we picked up Mateusz and headed back to Kosy Most to listen to rutting red deer – the signature sound of Bialowieza at this time of year. Red deer roared off camera this evening but Mateusz whistled in a fine male pygmy owl for us which perched above us in the light of the torch. Also tawny owl called at dusk out of sight and a female nightjar hunted around us at times like a ghost. Walking back we switched off our torches to search out the ghostly glow of the bioluminescent honey fungus as it flared and died like a will-o-the-wisp. Back at the van we ate a packed dinner before heading back to the hotel.

#### Day 4 Thursday 21st September Bialowieza

There were a few keen people out at 0530 for the beaver patrol this morning but no beavers sadly, just persistent rain that soon dampened our enthusiasm after first light and we headed back to the hotel early, and dripping wet, hoping that the weather would improve after breakfast.

Rain continued to fall as we headed for the former palace park. We took a quick look at the visitor centre and found some fresh beefsteak fungus on the impressive oaks outside. Our walk in the park revealed plenty of beautiful fungi and a surprising number of photogenic invertebrates including a nice preying mantis, and the larvae of knotgrass, swallowtail and small elephant hawk moth. The rain finally eased as we headed back to lunch.

Picking up our guide Mateusz after lunch we walked in to the only accessible part of the strictly protected area. Thankfully the rain stayed away during the next few hours. Having spent the previous two days in managed tall forest we were well equipped to appreciate the different nature of this last remaining wildwood fragment. Our first impressions were of a towering canopy with a surprisingly open understorey. Dead wood, both standing and prone, was abundant. Some of the trees especially the spruces were reaching heights in excess of 40 metres, but many had already succumbed to the ravages of the spruce bark beetle (*Ips typographus*). The grey, gloomy atmosphere was magical and induced a feeling of

serenity in some members of the group. The peace and quiet was however occasionally shattered by the stentorian roars of the nearby (but invisible) rutting male red deer.

All this splendid habitat was bound to yield results of one kind or another but birds were few and far between this year sadly (weather and timing?). We heard three species of woodpecker but did not see a one. Instead we concentrated on enjoying the architecture of this wonderful forest and the many fungi available along the trail. Mateusz showed us clumps of toothwort – a rare saprophytic fungus that is a speciality of the reserve. Walking on he showed us yet more fungi including the gruesomely named dead-man's-fingers. Bracket fungi featured heavily throughout and we found a one area where a single common earth-star (*Geastrum triplex*) graced the forest floor. Dusk arrived too quickly and we tramped back through the impressive entrance gate and back to the van. We thanked Mateusz profusely and dropped him back at his house before heading for dinner.

# Day 5 Friday 22<sup>nd</sup> September journey to Biebrza Marshes, via Siemianowka Reservoir & Bialystok Fishponds

The transfer day arrived and a chance to get a lie-in! Our final breakfast included sausage and scrambled eggs for all. Cecilia needed to replace her lost waterproofs and so the first stop on our journey was nearby Hajnovka. Here we quickly found a charming little hardware shop and the deal was done. Driving on we headed for the south shore of the reservoir at Siemianowka, low mist and light rain was the order of the morning and the rain increased in strength as we parked up by a pumping station. We sat waiting for it to ease and more than one of us wondered why we hadn't booked a trip to Costa Rica. But things rapidly improved, the rain eased, the mist lifted allowing us to see the reservoir and out we went to the nearby watchtower. Visibility improved minute-by-minute and eventually we noticed the huge bull elk out in the wetland! We were also treated to close views of a sub-adult spotted eagle and a number of other wetland birds.

Moving to the northern shore we stopped briefly to chat to a mushroom-collecting couple in a roadside woodland and take their photograph. Autumn fungi hunting really is the quintessential Polish pastime. Parking up at a near identical pumping station we ate our lunch but quickly had to drop everything when a huge adult white-tailed eagle flew right past us, swiftly followed by a dragonfly-noshing hobby and then another white-tailed eagle. Special. We got used to seeing up to two hobbies at a time as they hunted down the hawkers flying in the drizzly overcast conditions. Walking along the embankment we heard penduline tit, bearded tit and glimpsed green woodpecker, great reed warbler and whitethroat. Wolf scat was a surprise here. Along the railway was a couple of male *Sympetrum pedemontanum*, resting on trackside vegetation. A very photogenic dragonfly.

That just left tracking down our accommodation in Goniadz and tackling the huge kartacze (the local speciality, stuffed potato dumplings the size of a baby's head) that were delivered promptly after dark.

#### Day 6 Saturday 23<sup>rd</sup> September Biebrza Marshes

Today we set out on a tour of the southern half of this vast marsh complex. Our circular driving tour took us south down the west side, across the river and back up the east side of the marshes. We stopped frequently along the way at observation towers and boardwalks. First stop was the National Park HQ where we purchased our entrance tickets and also some carved elks. Nearby we walked a track out onto the edge of the floodplain and were treated to a flyover hawfinch and two delightfully frisky young foxes that were playing tag on a meadow. They eventually got wind of us though and shot off. Driving on we soon stopped again to look at our first crane family feeding in a meadow. Later we found four more right by the road for photographs, two adults and two gawky youngsters. We were to see and hear small groups of cranes throughout the day. Meanwhile Phill found us our first great grey shrike on a nearby roadside wire. Along the way we admired the use of Scandinavian granites to construct many of the older houses and farm buildings. This stone was dumped as erratics by the retreating ice sheet in the last glaciation. Bigger erratics dot the landscape and were a pitfall for the unwary would-be elk spotter.

Time was soon pressing and we headed to Borzostowo for lunch by the river. Out on the marsh we found a family of three white-tailed eagles that kept spooking the local waterfowl and sat up nicely for the telescope as they played king-of-the-castle on a fence post. Birds flushed up briefly by the eagles included green sandpiper, ruff and greylag goose. Hen harriers flew past occasionally. A few people even braved the leaning outdoor toilet.

Eventually we moved on to a nearby scenic outlook and bagged another hen harrier. Biebrza is a lot like the pristine part of Bialowieza in some respects, in that it takes some time for the extent and quality of the habitat to truly sink in. A slow burn. From these viewpoints we could see marvellous serried ranks of oxbow lakes in different stages of succession, alongside the current river channel.

Our next stop was a sunlit boardwalk into a sedge mire, here we connected with raft spider and our only common lizards of the tour. Darters lifted from the boardwalk in front of us but despite scanning we found no elk here.

We finally found a live grass snake at the next watchtower but again no elk were found. The day ended with a fly agaric photo shoot when we found a beautiful flush of this attractive fungus. A nice end to the day.

#### Day 7 Sunday 24th September Biebrza Marshes

A crack beaver patrol headed out pre-dawn for the nearby Rudski channel in a last ditch attempt to see this elusive mammal. We found plenty of sign but perhaps the high density of weekend fishermen was against us, as in the end we saw none. A bonus came though from a nearby watchtower, where we watched a randy red deer stag and rather unwillinging hind go through a complicated dance. The stag was handsomely bedecked with vegetation but it did not appear to make a difference.

After another huge Goniadz breakfast we drove the short distance to the Osowiec Twierdza HQ area. Sadly the visitor center was shut so we had no chance to look around the exhibition. We did however enjoy walking part of the trail here that took us to a wooden bridge over the river. Grass snakes were adundant in the sun along this walk and we enjoyed getting portraits. Fossicking for fungus produced a few new and exciting species including another earthstar.

Invertebrates showed well now that the sun had finally come out properly for the first time this week. New dragonflies included common hawker and black darter and Phill outdid us all by finding a superb brown hairstreak basking in the forest. The track was along the old WWI defences littered with trench systems and bunkers from the terrible fighting here in 1915. Gaudy chick-yellow pale tussock moth caterpillars wandered about looking for pupation sites. The autumn colours were fantastic, beautiful maples, set off by the colourful splash of guelder rose berries. Some members of the team encountered goshawk and lesser spotted woodpeckers.

We took lunch back at the van and were treated to a large flock of soaring cranes, bugling as they gained height. Afterwards we headed south to the trailhead at Barwik for a bracing walk straight out into the marsh. This was a nice goodbye to the area, again we struggled to find elk but did find a nice female roe deer from one of the towers. There was plenty of mammals sign along the trail with elk and boar tracks being obvious. Lorna found the best thing though when she discovered a superb goat moth caterpillar wandering the trail. Eventually the trail got too soggy and we turned for the van. A good end to another great day in the marsh.

#### Day 8 Monday 25th September departure

Our last morning was spent heading to Warsaw Chopin and our various flights. An interesting trip with lovely group of people.

#### Systematic List Number 1 Mammals

Square brackets indicate species recorded only by sign. DOR = dead on road.

Sorex araneus Heard at Bialowieza and Biebzra. [Common shrew] [Mole] Talpa europaea Signs regularly noted. Fox Vulpes vulpes A youngster pre-dawn on the first day at Bialowieza. Two youngsters playing tag on the first morning in Biebzra. Plenty of sign at both main sites and one glimpsed crossing [Marten sp.] Martes sp. the road after dark on the drive from the airport on the first day, it looked good for stone marten (Martes foina) but was not seen well. [Badger] Meles meles Sign at Biebzra. One crossing the road at night en route to Bialowieza. Two Racoon dog Nyctereutes procyonoides more seen at night on the way back from Kosy Most. One DOR at Biebzra. Lepus europaeus One pre-dawn at Bialowieza on the first bison hunt. European hare Red squirrel Sciurus vulgaris 1-3 per day at Bialowieza. One in Biebzra. [European beaver] Castor fiber Sign only this tour (at Biebrza). Wild boar Sus scrofa Scarce at Bialowieza these days due to control to counter the African swine fever outbreak, we got very lucky though with 8 across the road on the way back from Kosy Most. Fresh sign along the Barwik trail at Biebzra. Red deer Cervus elephas Just two animals seen at Bialowieza, including a fine stag at night. Rutting in full swing at this site and many males heard. A fine vegetation-strewn stag and an unwillinging hind from the watchtower just after dawn in Biebzra. Elk Alces alces One fine male on the first day at Bialowieza. Semianowka reservoir - a big male feeding out from the watchtower. Roe deer Capreolus capreolus 2-3 at Bialowieza. A few seen at Biebzra daily. Bison bonasus **European bison** At least 80 individuals in four groups at three locations at Bialowieza on the first morning with

Mateusz. A dozen the next morning at one location

were seen at very close range.

[Field vole] Microtus agrestis One DOR at Biebzra.

**Wood mouse sp.** A few at night in Bialowieza.

#### Systematic List Number 2 Birds

Species in square brackets were heard only or recorded by sign.

**Great cormorant** Phalacrocorax carbo A few at Siemianowka.

**Great egret** Casmerodius alba Widespread and frequently encountered in suitable habitat.

**Grey heron** Ardea cinerea Scattered records.

[White stork] Ciconia ciconia Plenty of empty nests in rural areas.

Mute swan Cygnus olor Small numbers at Siemianowka and Biebzra.

Greylag goose Anser anser Biebzra.

MallardAnas platyrhynchosWidespread and common.TealAnas creccaSmall numbers in wetland areas.WigeonAnas penelopeSmall numbers at Siemianowka .

**Tufted duck** Aythya fuligula Single male on Biebzra.

White-tailed eagle Haliaeetus albicilla The first was en route to Bialowieza from the airport.

Two more adults gave a very close flyby at Siemianowka. Family of three at Biebzra.

**Hen harrier** *Circus cyaneus* Small numbers daily at Biebzra.

Marsh harrier Circus aeruginosus Seen almost daily, good numbers remained in Biebzra.

**Sparrowhawk** Accipiter nisus Scattered records.

GoshawkAccipiter gentilisSingle at Biebzra on the second day.Common buzzardButeo buteoVery common and widespread.

**Lesser spotted eagle** Aquila pomarina One on the first day at Bialowieza over the hotel.

Spotted eagle Aquila clanga Single sub-adult at Siemianowka.

HobbyFalco subbuteoAt least two birds hunting at Siemianowka .CootFulica atraSmall numbers at Siemianowka and Biebzra.

**Common crane** Grus grus Several family groups and small flocks encountered feeding in

Biebzra. Also migrating flocks encountered frequently there

on both days.

**Lapwing** Vanellus vanellus Large numbers in Siemianowka and Biebzra area.

**Ruff** Philomachus pugnax Three at Siemianowka . More at Biebzra at the lunch stop on

the first day there.

Biebzra (1). Common snipe Gallinago gallinago Green sandpiper Tringa ochropus One at Biebzra. Actitis hypoleucos Common sandpiper Two at Biebzra Black-headed gull Larus ridibundus Siemianowka. Sterna hirundo Common tern Siemianowka. Whiskered tern Chlidonia hybridus Siemianowka. Columba livia Widespread in towns. Feral pigeon Woodpigeon Columba palumbus Scattered records.

Stock dove Columba oenas Three flying south over Siemianowka.

Collared dove Streptopelia decaocto Widespread and common near human habitation.

**Pygmy owl** Glaucidium passerinum Great encounter with a male at Bialowieza, thanks to

Mateusz's mimicry. Another male calling nearby.

Singles heard at Bialowieza.

[Tawny owl] Strix aluco

Nightjar Caprimulgus europaeus One very close female at Kosy Most (Bialowieza) at dusk.

[Kingfisher] Alcedo atthis Heard only at Bialowieza this year (1). Green woodpecker Picus viridis One at Siemianowka – seen very poorly.

[Black woodpecker] Dryocopus martius Three heard at Bialowieza.

**Great spotted woodpecker** Dendrocopus major Bialowieza and Biebzra – small numbers daily.

[Middle spotted Dendrocopus medius Heard only at Bialowieza.

woodpecker]

**Lesser spotted woodpecker** Dendrocopus minor Two birds seen by some and another heard at

Bialowieza. Two birds seen at Biebzra by some.

SkylarkAlauda arvensisSiemianowka and Biebzra (small numbers).Barn swallowHirundo rusticaWidespread. A huge build-up in Biebzra.

House martin Delichon urbica Widespread.

Tree pipit Anthus trivialis A few migrants noted flying overhead on most mornings.

Meadow pipit Anthus pratensis Siemianowka and Biebzra (small numbers).

White wagtail Motacilla alba Widespread and common.

Wren Troglodytes troglodytes Widespread.

**Dunnock** Prunella vulgaris Widespread (mostly heard), also some heard migrating

at Biebzra.

RobinErithacus rubeculaWidespread.Common redstartPhoenicrurus phoenicurusSingle at Bialowieza.

**Black redstart** Phoenicrurus ochrurus Local around habitation and buildings.

Blackbird Turdus merula Widespread in small numbers.

FieldfareTurdus pilarisScattered records.Song thrushTurdus philomelosScattered records.

Mistle thrush Turdus viscivorus Scattered records throughout.

Great reed warbler Acrocephalus One or perhaps two at Siemianowka.

arundinaceus

Whitethroat Sylvia communis One in tit flock at Siemianowka.

[Blackcap] Sylvia atricapilla Singles heard at Bialowieza and Biebzra.

Willow warbler Phylloscopus trochilus Siemianowka (1+).

Chiffchaff Phylloscopus collybita Very common and widespread.

**Goldcrest** Regulus regulus Widespread.

[Bearded tit] Panurus biarmicus Heard only at Siemianowka.

**Long-tailed tit** Aegithalos caudatus Commonly heard and occasionally seen throughout.

Marsh tit Parus palustris Widespread.

Willow tit Parus montanus [Bialowieza], [Siemianowka] and Biebzra (mostly heard

mly).

Crested tit Parus cristatus Several encounters at Bialowieza but not seen well. One in

willow at Siemianowka showed nicely.

[Coal tit] Parus ater Heard at Bialowieza. Blue tit Widespread and common. Parus caeruleus Parus major Widespread and very common. **Great tit** Nuthatch Sitta europaea Common in Bialowieza. **Common treecreeper** Certhia familiaris Recorded daily at Bialowieza. [Penduline tit] Remiz pendulinus Heard at Siemianowka. Lanius collurio Red-backed shrike Two at Siemianowka. Great grey shrike Lanius excubitor Biebzra, 2-4 daily.

Jay Garrulus glandarius Common at Bialowieza and Biebzra.

**Nutcracker** Nucifraga caryocatactes A few en route form the airport on the first day. Just one at

Bialowieza! Another at Biebzra. A poor year.

Widespread and common. Magpie Pica pica Jackdaw Corvus monedula Widespread and common. Rook Corvus frugilegus Widespread and common. Hooded crow Widespread and fairly common. Corvus corone Widespread and fairly common. Corvus corax Raven Widespread and very common. **Starling** Sturnus vulgaris

House sparrowPasser domesticusWidespread.Tree sparrowPasser montanusBiebzra.

**Chaffinch** Fringilla coelebs Widespread and common.

**Brambling** Fringilla montifringilla Migrating over Biebzra in the mornings.

**Greenfinch** Carduelis chloris Not recorded after the first day.

[Goldfinch] Carduelis carduelis Heard in Biebzra.

Siskin Carduelis spinus Widespread and locally common.

LinnetCarduelis cannabinaSiemianowka (2).[Bullfinch]Pyrrhula pyrrhulaHeard at Biebzra.

[Common crossbill] Loxia curvirostra Heard along the Tsar Road (Biebzra).

**Hawfinch** Coccothraustes Small numbers at Biebzra. Not seen well this year.

coccothrustes

**Yellowhammer** Emberiza citrinella Widespread but uncommon.

**Reed bunting** Emberiza schoeniclus Scattered records in suitable wetlands.

#### **Systematic List Number 3**

#### **Amphibians & Reptiles**

The taxonomy and systematic order follow 'A Field Guide to the Reptiles and Amphibians of Britain and Europe' by E.Nicholas Arnold, Collins  $2^{nd}$  edition 2002. Square brackets indicate species not seen alive. DOR = dead on road.

Common toadBufo bufoWidespread and common.Common frogRana temporariaWidespread and common.

**Pool/edible frog**Rana lessonae/esculenta Widespread.

[European tree frog] Hyla arborea Heard at Siemianowka.

Common lizard Lacerta vivipara Biebzra.

Grass snake

Natrix natrix

Bialowieza – obviously common because a huge number

DOR on the Tsar Road, we found up to 12 a day when the

sun came out.

## **Systematic List Number 4** Butterflies

Large whitePieris brassicaeWidespread.Small whiteArtogeia rapaeWidespread.

**Green-veined white** Artogeia napi Siemianowka and Beibzra. **Brimstone** Gonepteryx rhamni Bialowieza and Biebzra.

Brown hairstreakThecla betulaeOne at Biebzra.PeacockInachis ioWidespread.Red admiralVanessa atlantaWidespread.CommaPolygonum c-albumWidespread.

## Systematic List Number 5 Odonata

**Northern hawker** Aeshna juncea Biebzra.

**Southern hawker** Aeshna cyanea Bialowieza – the commonest Aeshna at

this site

Migrant hawker Aeshna mixta Widespread and common.

**Brown hawker** Aeshna grandis Barwik (Biebzra).

Moustached darter Sympetrum vulgatum Widespread and very common at some

sites (eg Siemianowka).

**Ruddy darter** Sympetrum sanguineum Biebzra.

**Banded darter** Sympetrum Several at Siemianowka.

pedemontanum

**Black darter** Sympetrum danae Biebzra (1).

#### Systematic List Number 6 Conifers

Pinaceae

Norway Spruce *Picea abies* Dominant in wetter forest. Scot's Pine *Pinus sylvestris* Locally dominant.

Cupressaceae

Juniper Juniperus communis Siemianovka understory

### Systematic List Number 7 Flowering Plants

Salicaceae

White Poplar Populus alba Between Warsaw and Bialowieza.

Black Poplar Populus nigra Bialowieza.

Aspen Populus tremula Damp forest and streamsides.

Betulaceae

Alder Alnus glutinosa Widespread and very common.

Silver Birch Betula pendula Drier woodland.

Corylaceae

Hornbeam Carpinus betulus Bialowieza. Hazel Corylus avellana Bialowieza.

Fagaceae

Common Oak Quercus robur Scattered.

Ulmaceae

Wych Elm Ulmus glabra Bialowieza.

Cannabaaceae

Hop Humulus lupulus Bialowieza.

Urticaceae

Stinging Nettle *Urtica dioica* 

Stingless Nettle Urtica galeopsifolia

Loranthaceae

Mistletoe Viscum album Bialowieza, on poplar.

Aristolochiaceae

Asarabacca Asarum europaeum Locally common in leaf in forest.

#### Polygonaceae

Amphibious Bistort Persicaria amphibia Siemianovka, Biebzra.

Bistort *Persicaria bistorta* Biebzra. Least Water-pepper *Persicaria minor* Siemianovka.

Knotgrass Polygonum aviculare

Polygonum arenastrum Bialowieza.

Redshank Polygonum persicaria

Giant Knotweed Reynoutria sachlinensis Bialowieza.

Water Dock Rumex hydrolapathum Widespread in suitable habitat.

## Chenopodiaceae

Fat Hen Chenopodium album

Chenopodium rubrum Biebzra.

#### Caryophyllaceae

Carthusian Pink Dianthus carthusianorum Bialowieza.
Maiden Pink Dianthus deltoides Siemianovka.

White Campion Silene alba

Bladder Campion Silene vulgaris Siemianovka. Lesser Stitchwort Stellaria graminea Bialowieza.

Wood Stitchwort Stellaria nemorum Bialowieza, common in woods.

## Nymphaceae

Yellow Water-lily Nuphar lutea

## Ceratophyllaceae

Hornwort Ceratophyllum demersum Ponds, Bialowieza.

#### Ranunculaceae

Wood AnemoneAnemone nemorosaIn flower in Bialowieza!Marsh MarigoldCaltha palustrisBiebzra, 1 in flower!Forking LarkspurConsolida regalisWidespread in first week.

Hepatica Hepatica nobilis Leaves in forests.

Meadow ButtercupRanunculus acrisBiebzra.Lesser SpearwortRanunculus flammulaBiebzra.

Goldilocks Aster linosyris

### Papaveraceae

Great Celandine *Chelidonium majus* Bialowieza.
Long-headed Poppy *Papaver dubium* Siemianowka .

## Cruciferae

Shepherd's Purse Capsella bursa-pastoris

#### Rosaceae

Wild Strawberry Fragaria vesca Scattered records.
Silverweed Potentilla anserina Scattered records.
Raspberry Rubus idaeus Very common in forests.

Stone Bramble Rubus saxatilis Bialowieza.

Rowan Sorbus aucuparia
Wild Cherry Prunus avium

Leguminosae

Narrow-leaved everlasting pea *Lathyrus sylvestris* Siemianovka, in leaf.

White Melilot Melilotus albus
Ribbed Melilot Melilotus officinalis

False Acacia Robinia pseudacacia Planted in shelter belts.

Zigzag Clover Trifolium medium Local.

Red Clover Trifolium pratense
White Clover Trifolium repens
Lesser Trefoil Trifolium dubium

Oxalidaceae

Wood Sorrel Oxalis acetosella Common in leaf in Bialowieza.

Yellow oxalis Oxalis corniculata Bialowieza

Geraniaceae

Marsh Crane's-bill Geranium palustre Bialowieza.

Herb Robert Geranium robertianum

Hippuridaceae

Mare's-tail Hippuris vulgaris

Linaceae

Fairy Flax Linum catharticum Biebzra.

Aceraceae

Norway Maple Acer platanoides
Sycamore Acer pseudoplatanus
Field maple Acer campestre

Balsaminanceae

Small balsam Impatiens parviflora Scattered records.
Touch-me-not balsam Impatiens noli-tangere Bialowieza

Celastraceae

Spindle-tree Euonymus europaeus Around Bialowieza village, in fruit.

Eastern spindle Euonymus verrucosa Just one at Bialowieza.

Rhamnaceae

Alder Buckthorn Frangula alnus

Tiliaceae

Small-leaved Lime Tilia cordata

Guttiferae

Common St.John's-wort Hypericum perforatum

#### Violaceae

Field Pansy Viola arvensis

Cucurbitaceae

Prickly Cucumber Echinocystis lobata Bialystok fishponds.

Lythraceae

Purple Loosestrife Lythrum salicaria Bialowieza.

Onagraceae

Hoary Willow-herb Epilobium parviflorum Siemianovka.

Evening Primrose sp. *Oenothera* sp.

Cornaceae

Dogwood Cornus sanguinea

Umbelliferae

Milk Parsley Peucedanum palustre Siemianovka, Biebzra.

Great Water-parsnip Sium latifolium In leaf. Cowbane Cicuta virosa Biebzra

Ericaceae

Ling Calluna vulgaris Local.
Bog rosemary Andromeda polifolia Biebzra.

Bilberry Vaccinium myrtillus Local at Bialowieza and Biebzra.

Cowberry Vaccinium vitis-idaea Northern bilberry Vaccinium uliginosum

Labrador Tea Ledum palustre Biebzra.

Plumbaginaceae

Thrift Armeria maritima Dam near Siemianovka, and Biebzra.

Oleaceae

Ash Fraxinus excelsior

Rubiaceae

Marsh Bedstraw Galium palustre

Convolvulaceae

Field Bindweed Convolvulus arvensis

Boraginaceae

True Alkanet Anchusa officinalis Biebzra.
Viper's Bugloss Echium vulgare Siemianovka.

Water Forget-me-not Myosotis scorpioides

#### Labiatae

Black Horehound Ballota nigra Bialystok fishponds. Wild Basil Clinopodium vulgare Bison reserve. Ground-ivy Glechoma hederacea Bialowieza. Yellow Archangel Lamiastrum galeobdolon Leaves in forest. Gipsywort Lycopus europaeus Biebzra. Self-heal Prunella vulgaris Bialowieza.

#### Solanaceae

Bittersweet Solanum dulcamara

#### Scrophulariaceae

Common Toadflax Linaria vulgaris Widespread but local.

Melampyrum nemorosum Flowering at Bialowieza.

Verbascum densiflorum Strekowa Gora and roadsides.

Dark Mullein Verbascum nigrum Bialowieza.

Green Field Speedwell Veronica agrestis Arable weed, Biebzra.

## Plantaginaceae

Ribwort Plantain Plantago lanceolata
Greater Plantain Plantago major

#### Caprifoliaceae

Common Elder Sambucus nigra
Snowberry Symphoricarpus albus
Guelder-rose Viburnum opulus

#### Dipsacaceae

Field Scabious Knautia arvensis Scattered records.

Sulphur Scabious Scabiosa ochroleuca Siemianovka.

Devil's-bit Scabious Succisa pratensis

#### Campanulaceae

Giant Bellflower Campanula latifolia Several plants in Bialowieza.

Spreading bellflower Bialowieza

Sheep's-bit *Jasione montana* Siemianovka and Kosy Most.

#### Compositae

Yarrow Achillea millefolium Very common.

MugwortArtemisia vulgarisCommon and widespread.Nodding Bur-marigoldBidens cernuaBialowieza and Siemianovka.Trifid Bur-marigoldBidens tripartitaBialowieza and Siemianovka.

Greater Burdock Arctium lappa Scattered records. Brown Knapweed Centaurea jacea Siemianovka.

Centaurea pannonica

Greater Knapweed *Centaurea scabiosa* Scattered.
Chicory *Cichorium intybus* Widespread.

Chicory Cichorium intybus Widespread.
Creeping Thistle Cirsium arvense

Cabbage Thistle Cirsium oleraceum Local.

Marsh Thistle Cirsium palustre Scattered records. Spear Thistle Cirsium vulgare Widespread.

Canadian Fleabane Conyza canadensis Hemp-agrimony Eupatorium cannabinum Locally very common.

Siemianovka. Annual Sunflower Helianthus annuus Jerusalem Artichoke Roadsides east of Warsaw. Helianthus tuberosus

Grassland by Park Narodowy gate. Umbellate Hawkweed Hieracium umbellatum

**Nipplewort** Lapsana communis Wall Lettuce Mycelis muralis Bialowieza.

Butterbur Petasites hybridus Garden Golden-rod Solidago canadensis Naturalised on verges.

Prickly Sow-thistle Sonchus asper Biebzra. Near Warsaw. Tansy Tanacetum vulgare

Dandelion Taraxacum sp.

Tripleurospermum inodorum Scentless Mayweed

Shaggy soldier Galinsoga ciliata Mouse-ear hawkweed Pilosella officinarum

## Monocotyledones

#### Alismataceae

Common Water-plantain Alisma plantago-aquatica Leaves at Bachory fishponds. Sagittaria sagittifolia Arrowhead Biebzra.

#### Hydrocharitaceae

Canadian Waterweed Elodea canadensis

Frog-bit Hydrocharis morsus-ranae Biebzra. Water Soldier Stratiotes aloides Biebzra.

#### Liliaceae

In fruit at Bialowieza. Lily-of-the-valley Convallaria majalis May Lily Maianthemum bifolium In fruit at Bialowieza.

#### Gramineae

Reed Phragmites australis

#### Lemnaceae

Common Duckweed Lemna minor

#### Sparganiaceae

Branched Bur-reed Bialowieza, Biebzra. Sparganium erectum

#### **Typhaceae**

Lesser Reedmace Typha angustifolia Dojlidy and Popielewo fishponds. Great Reedmace Typha latifolia Bialowieza.

#### Orchidaceae

Dark Red Helleborine 1 dead spike at Kosy Most. Epipactis atrorubens

#### **Systematic List Number 8 Fungi**

Red cracked bolete Boletus chrysenteron Biebzra. Lactarius deliciosus Bialowieza. Saffron milkcap Widespread and much-photographed... Fly agaric Amanita muscaria **Panthercap** Amanita pantherina Bialowieza and Biebzra. A member of this genus growing in Pholiota spp. dense clumps on dead wood in the Strict Protection Area (Bialowieza). Perhaps alnicola. The parasol Macrolepiota procera Bialowieza, Biebzra Honey fungus Armillaria mellea Widespread. Seen bioluminescing at Kosy Most (Bialowieza)! Bialowieza. Amethyst deceiver Laccaria amethystea Lilac bonnet Mucena pura Bialowieza. Birch polypore Piptoporus betulinus Bialowieza (a bracket) **Root fomes** Heterobasidon annosum Bialowieza (a bracket) **Tinder fungus** Fomes fomentarius Bialowieza (a bracket) Red-banded polypore Fomitopsis pinicola Bialowieza (a bracket) Fistulina hepatica Beefsteak fungus Bialowieza (a bracket) – one small example on an oak tree in front of visitor centre. Alder bracket Inonotus radiatus Bialowieza. Stump puffball Lycoperdon pyriforme Bialowieza - grows on wood. Pestle puffball Lycoperdon excipuliformis Bialowieza. Common puffball Lycoperdon perlatum Shaggy ink-cap Coprinus comatus Widespread. Phallus impudicus Bialowieza. Common stinkhorn Dead-man's fingers Xylaria polymorpha Bialowieza. **Earthfan** Thelephora terrestris Biebzra. Hieracium clathroides Coraltooth fungus Bialowieza (Strict Protection Area). Orange peel fungus Aleuria aurantia Bialowieza. Chanterelle Cantharellus cibarius Bialowieza and Biebzra. Common earthstar *Geastrium triplex* One only in the SPA at Bialowieza. Phill found another at Beibzra (a younger example of the same species?) Strict branch coral Ramaria stricta agg. Bialowieza. Tremella mesenterica **Brain fungus** Biebzra.

Plus a load of unidentified Lactarius, Russula, Hygrocybe and Inocybe!

Clavaria fragilis

Xylaria hypoxylon

Clavulinopsis fusiformis

White spindle

Yellow spindle

Candle snuff

Siemianowka.

Bialowieza.

Bialowieza.